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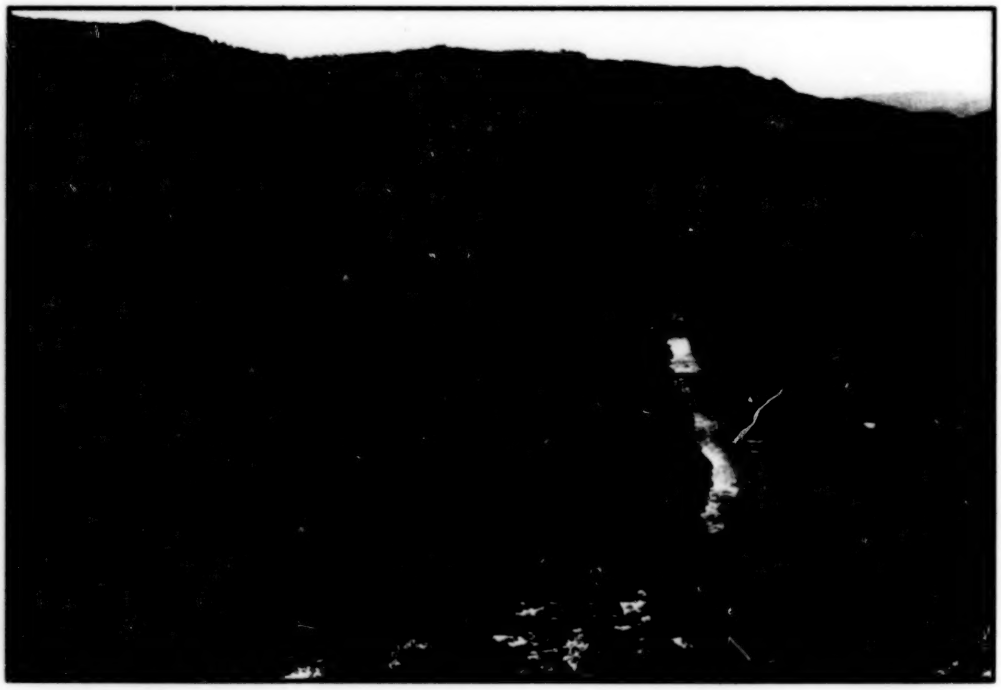
U.S. Department of the Interior
Bureau of Land Management

Eugene District Office
2890 Chad Drive.
Eugene, Oregon 97408

February 1999

Fiscal Year 1998 Annual Program Summary and Monitoring Report for the Eugene District



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As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

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1998

ANNUAL PROGRAM SUMMARY
And Monitoring Report
for the

BLM EUGENE DISTRICT

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

II

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EXECUTIVE SUMMARY

This document combines the Eugene District Annual Program Summary and Monitoring Report for fiscal years 1996, 1997, and 1998. This Annual Program Summary addresses the accomplishments of the Eugene District in such areas as watershed analysis, Jobs-in-the-Woods, silviculture, wildlife, forestry, recreation, and land tenure adjustments. It also provides information concerning the Eugene District budget, timber receipt collections, and payments to Lane, Linn, Douglas, and Benton counties. The Monitoring Report compiles the results and findings of implementation monitoring of the first 3 years of implementation of the Eugene District Management Plan (RMP). The Monitoring Report, which is a "stand alone" document with a separate executive summary, follows the Annual and 3rd Year Program Summary in this document.

Fiscal years 1996 through 1998 were interesting and challenging years for Eugene District in implementing the Northwest Forest Plan and adjusting to a new Resource Management Plan. The years included events such as floods, high winds, appeals and protests, and the listing of the coho salmon, bull trout, spring chinook salmon, winter steelhead trout, coastal cutthroat trout as threatened or proposed threatened, and the Umpqua River cutthroat trout as endangered.

Although this "Annual Program Summary" gives only a very basic and very brief description of the programs, resources, and activities in which the Eugene District is involved, the report does give the reader a sense of the enormous scope, complexity, and diversity involved in management of the Eugene District public lands and resources. Although there are and will continue to be challenges that will require us to adapt and give our best, the managers and employees of Eugene District take pride in the accomplishments described in this report.

THIRD YEAR EVALUATION - The Eugene District RMP/ROD requires that a formal evaluation be completed at the end of every third year after implementation began. The purpose of the evaluation is to determine whether there is a significant cause for an amendment or revision of the plan. The focus of the evaluation is on whether the RMP goals and objectives are being met, whether the goals and objectives were realistic and achievable, and whether changed circumstances or new information have altered expected impacts as described in the RMP/FEIS.

Simultaneously with other western Oregon BLM Districts, Eugene has initiated the collection of supplemental information and analyses required for evaluating the RMP. The evaluation will be based on the implementation actions and plan and project monitoring from May 1995 through September 30, 1998. BLM staff have already taken actions to determine if there has been any significant change in the related plans of other Federal agencies, State or local governments, or Native American Indian tribes, or whether there are other new data of significance to the plan.

All supplemental analyses and RMP evaluations are expected to be completed by the summer of 1999, when they will be made available for public review prior to approval by the BLM Oregon/Washington State Director. The State Director's findings will indicate whether or not the western Oregon RMPs are individually or collectively still valid for continued management direction or require plan amendments or revisions, together with appropriate environmental analyses and public participation.

Table 1 - RMP - Summary of Renewable Resource Management Actions, Directions, and Accomplishments

RMP RESOURCE ALLOCATION OR MANAGEMENT PRACTICE OR ACTIVITY	FISCAL YEAR 1998 ACCOMPLISHMENTS	CUMULATIVE ACCOMPLISHMENTS 1996-1998	PROJECTED DECADAL PRACTICES
Regeneration harvest (acres offered)	519	**2651	5700
Commercial thinning/density management/ uneven-age harvests (acres offered)	1488	**2534	7300
Site preparation (acres)	634	2,516	4,300
Vegetation control, fire (acres)	-0-	-0-	-0-
Prescribed burning (hazard reduction acres)	12	-0-	500
Prescribed burning (wildlife habitat and forage reduction acres)	-0-	-0-	4,000
Natural or artificial ignition prescribed fire for ecosystem enhancement (acres)	-0-	-0-	5,400
Animal damage control (acres)	1,142	2,298	6,000
Precommercial thinning (acres)	5,139	13,401	5,900
Brush field/hardwood conversion (acres)	-0-	-0-	500
Planting/ regular stock (acres)	897	1,550	-0-
Planting/ genetically selected (acres)	245	799	6,800
Fertilization (acres)	-0-	-0-	16,700
Pruning (acres)	51	51	6,300
New permanent road const. (miles/acres*)	2.88/14	8/40	8/42
Roads fully decommissioned/ obliterated (miles/acres *)	1.83/9	12.9/64	-0-
Timber sale quantity offered (mm board feet)	39.0	**125.5	360
Timber sale quantity offered (mm cubic feet)	6.9	**21.6	61
Noxious weed control, chemical (sites/acres)	-0-	-0-	-0-
Noxious weed control, other (sites/acres)	43/204	112 /268	-0-

* Bureau managed lands only. ** Represents cumulative accomplishments from 1995 to 1998

Table 2 - RMP - Summary of Nonbiological Resource or Land Use Management Actions, Directions, and Accomplishments

RMP RESOURCE ALLOCATION OR MANAGEMENT PRACTICE	ACTIVITY UNITS	FISCAL YEAR 1998 ACCOMPLISHMENTS	CUMULATIVE ACCOMPLISHMENTS 1996-1998
Realty, land sales	(actions/acres)	0/0	1/0.37
Realty, land exchanges	(actions/acres acquired/disposed)	0/0/0	4/533/200
Realty, R&PP leases/patents	(actions/acres)	0/0	0/0
Realty, road rights-of-way acquired for public/agency use*	(actions/miles)	0/0	3/0.56
Realty, road rights-of-way, or permits granted**	(actions/miles)	10/19.95	46/76.31
Realty, utility rights-of-way granted (linear/areal)	(actions/miles/acres)	3/4.03/0	6/5.05/0.03
Realty, withdrawals completed	(actions/acres)	0/0	1/37
Realty, withdrawals revoked	(actions/acres)	0/0	1/120
Mineral/energy, total oil and gas leases	(actions/acres)	0/0	0/0
Mineral/energy, total other leases	(actions/acres)	0/0	0/0
Mining plans approved	(actions/acres)	0/0	0/0
Mining claims patented	(actions/acres)	0/0	0/0
Mineral material sites opened	(actions/acres)	0/0	0/0
Mineral material sites, closed	(actions/acres)	0/0	0/0
Recreation, maintained off highway vehicle trails	(units/miles)	0/0	0/0
Recreation, maintained hiking trails	(units/miles)	11/23	33/69
Recreation, sites	(units/acres)	10/600***	30/1800***
Cultural resource inventories	(sites/acres)	0/2,000	1/6,000
Cultural/historic sites nominated	(sites/acres)	0	0
Hazardous material sites	(identified/cleaned)	7 / 7	16 / 16

* Does not include access **acquired** through new reciprocal right-of-way agreements, amendments to existing agreements, or exercise of rights under existing agreements.

** Does not include road access **granted** through new reciprocal right-of-way agreements, amendments to existing agreements or exercise of rights under existing agreements.

*** Estimated

1998 ANNUAL PROGRAM SUMMARY
And Monitoring Report

INTRODUCTION

This Annual Program Summary is a review of the programs on the Eugene District Bureau of Land Management for the period of June 1995 through September 1998. It is designed to report to the public, local, State, and Federal agencies a broad overview of activities and accomplishments for Fiscal Years 1996, 1997, and 1998. This report addresses the accomplishments of the Eugene District in such areas as watershed analysis, Jobs-in-the-Woods, forestry, recreation, and other programs. It also provides information concerning the Eugene District budget, timber receipt collections, and payments to Lane County. Included in the Annual Program Summary is the Monitoring Report for the Eugene District.

Implementation of the Northwest Forest Plan began in April 1994 with the signing of the Northwest Forest Plan Record of Decision. Subsequently, the Eugene District began implementation of the Resource Management Plan (RMP), which incorporates all aspects of the Northwest Forest Plan, in June 1995 with the signing of the RMP Record of Decision. Fiscal Year 1996 through 1998 represent the first 3 years of implementation of the Resource Management Plan.

There are 20 land use allocations and resource programs under the Eugene District Resource Management Plan. Not all land use allocations and resource programs are discussed individually in a detailed manner in this Annual and 3rd Year Program Summary because of the overlap of programs and projects. A detailed background of various land use allocations or resource programs is not given in this Annual Program Summary in order to keep this document relatively concise. Additional information may be found in the Eugene District Resource Management Plan Record of Decision and supporting Environmental Impact Statement. These documents are available at the Eugene District office.

The manner of reporting the activities differs among the various programs. Some resource programs lend themselves well to a statistical summary of activities while others are best summarized in short narratives. Some programs include information for only specific years because of the method in which records are kept and summarized. Further details concerning individual programs on the Eugene District may be obtained.

BUDGET

During fiscal years 1996 to 1998 the Eugene District had a total appropriation of $45.4 million. This included $4.2 million for the Jobs - in-the-Woods program, $2.6 million for the acquisition of the West Eugene Wetlands, and about $3 million for repair of damage caused by the 1996 and 1997 floods.

There were an average of 228 full time employees during this period.

RECREATION PIPELINE FUNDS

This fund is intended to reduce infrastructure replacement or facility maintenance needs and resolve critical visitor safety or recreation management needs or issues identified in land use plans, including resource protection needs. During the first year of implementation in FY 1998 (funding became available in early May 1998), the Eugene District obligated approximately $355,000 of the recreation pipeline fund to the design, procurement, and construction of critical infrastructure replacement or repair and visitor safety needs. Projects undertaken in FY 1998 included:

- Replacement of picnic shelters and fireplaces at the Clay Creek Recreation Site.
- Resurfacing the Whittaker Creek Campground.
- Mosby Creek Trail head engineering and contract preparation.

- Guard rail and vehicle barriers replacement at Whittaker Creek Campground.
- Purchase and installation of a replacement vault toilet at Whittaker Creek Campground.
- Purchase of a vault toilet for the Mosby Creek Trail head
- Purchase of a vault toilet for Silver Creek Landing on the McKenzie River.
- Purchase of a vault toilet for the Lower Lake Creek Recreation Site.

Planning was also performed to prepare for additional projects in FY 1999, including systems renovations and disabled access improvements at Shotgun Creek Park, expansion of camping services at Whittaker Creek Campground, and construction of facilities and trail at the Lower Lake Creek Site.

TIMBER SALE PIPELINE FUNDS - Forest Development and Sales

The Timber Sale Pipeline Restoration Fund was established under Section 327 of the Omnibus Consolidated Rescissions and Appropriations Act of 1966 (Public Law 104-134). The Act established separate funds for the Forest Service and the Bureau of Land Management, using revenues generated by timber sales released under section 2001(k) of the FY 1995 Supplemental Appropriations for Disaster Assistance and Rescissions Act. Public Law 104-134 directs that 75 percent of the fund be used to prepare sales sufficient to achieve the total Allowable Sale Quantity (ASQ) and that 25 percent of the fund be used to complete a backlog of recreation projects.

The BLM intends to use this fund to regain a year's lead time in the preparation of timber sales over a five-year time frame.

During Fiscal Year 1998, the Eugene District completed a number of different types of work using this fund. Implementation work such as timber sale layout and marking was completed on one sale. Most of the fund was spent on initial steps such as reconnaissance, identifying streams and riparian reserves, botanical and cultural clearances, and Interdisciplinary Team project design and analysis of FY 2000 and FY 2001 planned timber sales.

RECREATION FEE DEMONSTRATION PROGRAM

In early March 1998, the Eugene District received approval for establishing its Recreation Area's pilot Fee Demonstration Projects under the authority of Public Law 104-134, Section 315. This authority allows the retention and expenditure of recreation fees for operations (including the cost of collecting fees) and maintenance of the recreation sites and areas where the fees were collected. A special account was established for each area.

Prior to 1998 all recreation fees were combined with other revenue sources from public O & C lands and allocated between the USDI and the O&C counties. Recreation facilities were wholly dependent on the funding provided through the Congressional appropriations process for operations and maintenance funding.

The Association of O&C Counties supported allowing the retention of all recreation fee revenues under the Fee Demonstration Pilot authority to help operate the Bureau's recreation facilities.

Implementation Status - The Recreation Fee Demonstration Program was initiated in 1997 and is being fully implemented, and includes all Eugene District recreation program fee sites and Special Recreation Permits. Fee sites include the Whittaker Creek Campground, Clay Creek Campground and group picnic shelters, Sharps Creek Campground, and Shotgun Creek Park. Fees generated from these sites and applied to the Fee-Demo program are shown in the table below:

Table 3 - Recreation Fee Demonstration Program Statistics

SITE NAME	FY 1998 REVENUES $	UTILIZATION $
Shotgun Park	10,230	400
Whittaker Creek Campground	9,998	1,207
Clay Creek Campground	6,999	-0-
Clay Creek Group Shelters	639	-0-
Sharps Creek Campground	2,451	-0-

Revenues were also collected for seven (7) Special Recreation Permits - $1,622.

During FY 1998 relatively little of the Fee Demonstration monies were actually used for fee collection, maintenance, enhancements, and operating costs because the year's work had already been programmed prior to receipt of the monies. As the fee demonstration accounts build to useable levels, they will be utilized fully for operations, collections, maintenance, and enhancements.

Golden Passports - The revenues accumulated through the sale of Golden Age and Golden Access Passports amounted to $990 for FY 1998. Of this amount, 15 percent was allocated to the fee demo program ($148.50). None of these funds have been utilized to date.

CHALLENGE COST SHARE

The Eugene District leverages its funds with non-federal partners through its Challenge Cost Share (CCS) program. The CCS projects are partnerships with non-federal partners such as State and local governments, tribes, nonprofit organizations, landowners, individuals, corporations, or private institutions, working together to accomplish common objectives. To qualify as a CCS project, BLM must match appropriated funds with contributions of goods, services, or funds from this non-federal partner. Service oriented initiatives that are educational or customer service oriented are also acceptable uses of CCS funds as long as they meet Bureau objectives or benefit public land uses. Congressional support for this strategy continues to be strong and the Eugene District is participating in more CCS projects than in the past. The following is a table listing the projects funded by CCS.

Table 4 - Eugene District Challenge Cost Share Projects
FY 1996 - FY 1998

FY 1996	Interagency conservation strategy (West Eugene Wetlands) for native prairie habitats (year 2)/The Nature Conservancy, City of Eugene, Oregon Department of Transportation
	Restoring habitat for the Fender's blue butterfly (year 2)/The Nature Conservancy, University of Washington
	Location and identification of important bat roosting and foraging areas in the Mohawk/McGowan watershed (year 2)/Weyerhaeuser, Willamette Industries
	Identify bat habitat associations, and associations with roosting structures in the McKenzie River watershed/Weyerhaeuser, Willamette Industries, Bat Conservation International, Oregon State University
	Identification of bat species occurrences and roosting sites in the Lake Creek watershed/Weyerhaeuser, Oregon State University
	Influences of hydrology on wetland prairie plant communities: essential information for restoration/Oregon State University
	Assist regional and national efforts to survey and monitor neotropical migratory and nongame birds/Weyerhaeuser, Lane Community College, Beak Consultants

	Genetic tree improvement: evaluation of knobcone pine and Monterey pine study sites/Tree Improvement Enterprises
	West Eugene Wetlands T&E Model: predicting responses of threatened and endangered plant species to management actions/Oregon State University
	Population monitoring of Bradshaw's lomatium (multi-year)/Oregon Department of Agriculture
	Monitoring *Cimicifuga elata* (multi-year) Oregon Department of Agriculture
	Data summary and population viability analysis for *shaggy horkelia*/Oregon Department of Agriculture
FY 1997	Controlling Woody Vegetation in Wetland Prairie
	"Moss" Harvesting: Estimation of impact
	Mohawk/McGowan Watershed - snag management
	Willamette River Watershed: Neotropical Migratory Birds
	Transcribe and digitize historic GLO data for 15 townships
	Effect of Habitat Size on Herptofauna Associated with Oak Woodland Habitats in the Willamette Valley
	Cimicifuga elata Genetics Study
	McKenzie River Watershed Bat Survey
	Restoring Habitat for the Fender's Blue Butterfly
	Transition Matrix Modeling and Population Monitoring for *Lomatium bradshawii*
	Mohawk/McGowan Watershed Bat Survey
	Transition Matrix Modeling and Population Monitoring for *Horkelia congesta*
	Relationship of Amphibians to Coarse Woody Debris in Managed Forests of Western Oregon
	Neotropical Migratory Birds: Uses of Forest Habitats
FY 1998	Historic Regeneration Patterns of Foothill Ponderosa Pine
	Genetic Study of *Cimicifuga elata* Populations at a Local Geographic Scale
	Propagating and Growing the Rare Mountain Slipper Orchid, *Cypripedium montanum*
	Characteristics and Spatial Relationships of Day Roosts for a Bat Community in the Western Oregon Cascades
	Down Woody Debris Sampling for watershed analysis and information on the structural characteristics of spotted owl nesting and foraging locations
	Population Monitoring for Kincaid's lupine
	Restoring Habitat for Fender's Blue Butterfly
	Effect of habitat size on Herpetofauna with oak Woodlands/Oak woodland Assessment

EMPLOYMENT TRENDS

Since implementation of the Eugene District RMP in 1995, Lane County, Oregon, and the United States have benefitted from a robust economy. Growth in wage and salary employment has been impressive. Statewide employment increased 11.9% between 1994 and 1997, and for Lane County employment increased by 10,900 jobs, or 8.6%. Since the 1984-88 baseline period used by the RMP, total wage and salary employment has increased by 35.5% in Lane County. This compares to a 42.7% increase statewide.

Since the baseline period Lumber and Wood Products employment in Lane County has dropped from 11,020 to 7,200 in 1997, a decrease of 34.7%. During the baseline period, Lumber and Wood Products employment represented 10.9% of total employment. Lumber and Wood Products currently represents 5.2% of total employment. Job losses and employment growth in other sectors have combined to reduce the importance of the Lumber and Wood Product industry in the local economy. Employment sectors that have grown significantly since the baseline period include Construction and Mining (127.3%), Other Manufacturing (67.9%), Services (67.3%), and Finance-Insurance-Real Estate (54.0%).

Statewide, Lumber and Wood Products employment has decreased by 15,160, or about 20% since the 1984-88 baseline period, to 59,900 in 1997. The decline in Lumber and Wood Products employment is less than would be anticipated given the 50% decline in harvests. Factors such as decreased exports and increases in manufactured home employment have had an offsetting effect (see Tables 5 and Table 6 for detailed information on employment by industry for Oregon, and Lane County).

Dense Second Growth Douglas Fir Stand

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Table 5 - Resident Labor Force, Employment by Industry, Oregon

	1970	1980	Average 1984-88 Baseline	1990	1991	1992	1993	1994	1995	1996	1997
Civilian Labor Force	864,500	1,295,000	1,362,400	1,491,000	1,508,000	154,200	1,596,000	1,640,000	1,656,200	1,719,700	1,731,700
Unemployment	61,700	107,000	104,800	82,000	90,000	116,000	116,000	89,000	80,300	101,600	100,900
Total wage and salary Emp.	709,200	1,044,600	1,068,680	1,251,900	1,250,800	1,274,200	1,308,400	1,362,900	1,418,400	1,474,600	1,524,900
Total Manufacturing	172,300	215,100	203,240	220,300	211,700	209,000	211,700	221,300	229,300	235,800	243,700
Lumber & Wood Products (& paper)	76,200	79,900	75,060	73,200	65,800	63,800	62,700	63,300	61,300	59,800	59,900
Other Manufacturing	96,100	135,200	128,180	147,100	145,900	145,200	149,000	158,000	168,000	176,00	183,800
Total Non-Manufacturing	536,900	829,500	865,440	1,031,600	1,039,000	1,065,200	1,096,700	1,141,600	1,189,100	1,238,900	1,281,100
Const. & Mining	30,800	48,800	35,800	54,000	53,000	52,000	55,700	62,900	70,400	79,400	83,500
Trans., Comm. & Utilities	48,700	60,500	58,040	64,500	65,200	65,700	66,800	68,900	71,300	73,500	74,100
Trade	162,000	255,600	269,680	313,100	314,300	318,700	328,900	344,100	357,000	365,900	377,500
Finance, Ins. & Real Est.	36,000	70,000	69,360	80,300	83,200	86,000	84,600	87,800	87,200	91,000	95,100
Services & Misc.	112,700	191,400	231,180	296,200	269,900	311,800	328,300	343,200	362,900	382,600	400,500
Government	146,700	203,200	201,360	223,500	226,400	231,000	232,600	234,700	240,200	246,600	250,400

Table 6 - Resident Labor Force, Employment by Industry, Lane County

	1970	1980	Average 1984-88 Baseline	1990	1991	1992	1993	1994	1995	1996	1997
Civilian Labor Force	87,250	135,400	134,420	148,200	147,500	145,600	150,600	155,200	155,900	159,900	157,800
Unemployment	6,850	13,300	10,220	8,700	9,600	10,700	11,500	8,400	8,200	9,200	9,000
Total Wage and Salary Emp.	69,650	102,900	101,240	117,900	115,700	117,200	119,500	126,300	129,500	133,100	137,200
Total Manufacturing	18,400	19,800	19,300	20,700	19,000	18,200	18,500	19,200	19,600	19,900	21,100
Lumber & Wood Products	15,400	12,900	11,020	10,200	8,700	8,300	7,900	7,900	7,600	7,400	7,200
Other Manufacturing	3,000	6,900	8,280	10,500	10,300	9,900	10,600	11,300	12,000	12,500	13,900
Total Non-Manufacturing	51,250	83,100	81,960	97,200	96,700	99,000	101,000	107,000	109,900	113,300	116,100
Const. & Mining	2,950	4,600	3,300	4,200	4,200	4,500	4,900	5,700	6,100	6,800	7,500
Trans., Comm. & Utilities	4,150	5,100	4,180	4,500	4,400	4,500	4,700	4,700	4,700	4,500	4,500
Trade	14,650	25,700	25,820	30,600	30,000	30,000	30,700	32,100	33,500	34,000	34,600
Finance, Ins. & Real Est.	2,950	5,500	4,740	5,800	6,100	6,200	6,300	6,800	6,800	7,100	7,300
Services & Misc.	10,050	19,700	22,180	28,000	27,800	29,200	31,100	33,700	34,600	36,100	37,100
Government	16,500	22,500	21,800	24,200	24,200	24,600	24,000	24,000	24,300	25,000	25,000

ALL LAND USE ALLOCATIONS (LUAs)

Changes in major LUA acreages have occurred since completion of the Record of Decision (ROD) due to land tenure adjustments (land exchanges, land sales, boundary adjustments, and detected errors) and to identification of new T&E species locations and an unmapped LSR correction.

Late-Successional Reserves - Eighty acres were traded out of BLM ownership in an exchange with International Paper Company in June 1995. An additional 1,391 acres were transferred from Eugene BLM jurisdiction to the Salem BLM District in a boundary adjustment completed in February 1997.

General Forest Management Area - Three land exchange transactions resulted in a net gain of 364 acres in this allocation. In an exchange with International Paper Company 120 acres were traded out of BLM ownership, while 484 acres were acquired in exchange transactions with International Paper Company, Karen Toftemark, and Taylor Ramsey.

Connectivity - There was a decrease of 0.37 acre in this LUA due to a land sale completed to resolve a long-standing inadvertent occupancy trespass.

Adaptive Management Area - One exchange transaction with the John Hancock Mutual Life Insurance Company resulted in an increase of 49 acres in this LUA.

District Designated Reserves - There were no changes due to land tenure adjustment actions.

Riparian Reserves - Approximately 110 acres of Riparian Reserve were traded out of federal ownership since completion of the ROD, while 765 acres were transferred from the Eugene District to the Salem District in a boundary adjustment. Approximately 293 acres were acquired through land exchange transaction. Exact acreage figures are not yet possible since the Riparian Reserves are not all mapped at this time.

In FY 1998 a theme was created in the Bureau's Geographic Information System(GIS) to track the major land use allocations. The GIS system has been used to complete Table 7 showing Land Use Allocation acreages as of October 1998.

Table 7 - Realty Actions Affecting LUA Acreages

Land Use Allocation	Total BLM Acres - October 1998				Acreage calculated using Land Use Allocation (LUA) and Landlines (LLI) themes in GIS. Acreage changes slightly over time as new property corner coordinate information is entered in LLI theme to better define the actual location of public land property boundaries. Such changes will occur even when there are no changes in actual property ownership. The acreages shown were derived from the initial comparison of the LLI and LUA themes. Some inconsistencies between the 2 themes were identified and are in the process of being resolved, with future comparisons expected to produce more accurate numbers with slightly higher total acreages.
	O&C	PD	Other	Total	
Late-Successional Reserves - LSR	131,400	5,500	0	136,900	
General Forest Mgmt. Area - GFMA	98,300	1,700	0	100,000	
Connectivity	57,100	200	400	57,700	
Adaptive Mgmt. Areas - AMA	14,800	1,400	0	16,200	
District Designated Reserves - DDR	2,500	400	0	2,900	
Total	304,100	9,200	400	313,700	

Table 8 - Major Land Allocation Acres

Land Use Allocation	Total BLM Acres - October 1995[1]				
	O&C	PD	Other	Total	Corrected Total*
Late-Successional Reserves - LSR				136,500	138,700
General Forest Mgmt. Area - GFMA				100,400	100,000
Connectivity				58,000	57,800
Adaptive Mgmt. Areas - AMA				16,200	16,100
District Designated Reserves - DDR				3,000	2,900
Total				314,100	315,500

Total acres from page 18 of the Record of Decision were incorrect. Partition of these acres among the Land Status categories (O&C, PD, etc.) was not made in 1995 and is thus not available. The acreages were computer calculated from the Bureau's GIS system (and then rounded to the nearest 100 acres) using October 1992 data which did not reflect several land tenure adjustment actions (exchanges, sales, and acquisitions, including exchanges with Willamette Industries Inc., Bohemia Inc., and Rosboro Lumber Co. and acquisition of the ROW River Trail) that were completed prior to June 1995.

* The 1995 table did not accurately reflect several un-mapped LSRs, and the three exchanges and acquisitions listed above. To correct these errors, the 1995 table should have indicated the acreages shown in this column(rounded to the nearest hundred acres). Comparison of the 1995 and 1998 data tables will thus not accurately identify changes resulting from land ownership changes completed after June 1995. Changes in Land Use Allocation acres due to land tenure actions completed between June 1995 and September 30, 1998 are identified and discussed in the narrative preceding the above 2 tables.

AQUATIC CONSERVATION STRATEGY IMPLEMENTATION

The Aquatic Conservation Strategy (ACS) was developed to restore and maintain the ecological health of watersheds and aquatic ecosystems contained within them on public lands. The strategy is to protect salmon and steelhead habitat on federal lands managed by the BLM. This conservation strategy employs several tactics to approach the goal of maintaining the "natural" disturbance regime. The ACS strives to maintain and restore ecosystem health at watershed and landscape scales to protect habitat for fish and other riparian-dependent species and resources and restore currently degraded habitats.

Riparian Reserves - Silvicultural Practices have been implemented within Riparian Reserves to control stocking, reestablish and manage stands, and acquire desired vegetation characteristics needed to attain Aquatic Conservation Strategy (ACS) objectives. These silvicultural practices include tree planting, precommercial thinning, and commercial thinning.

Table 9 - Riparian Reserve Stand Treatments (# acres treated)

	FY 1995	FY 1996	FY 1997	FY 1998
Precommercial Thinning (acres)	0	1600	1450	600
Commercial Thinning (acres)	20	19	11	317
Coarse Woody Debris Creation (acres)	0	0	0	14
Snag Creation - acres (# of snags created)	15 (11)	935 (640)	984 (1494)	1363 (2230)

Harvested areas in Riparian Reserves have been reforested following timber sales released in accordance with Sec. 2001(k)(1) of the 1995 Rescissions Act (PL 104-19)[1] and timber sales that had been harvested or sold prior to the Northwest Forest Plan. Tree planting is also addressed in the section on "Timber Resources - Silvicultural Activities."

Approximately 3650 acres within Riparian Reserves have been precommercially thinned to control stocking and manage stands. Precommercial thinning is also addressed in the section on "Timber Resources - Silvicultural Activities."

Approximately 367 acres within Riparian Reserves have been commercially thinned to accelerate the growth of trees, provide large snags and down logs, and manage species composition. Commercial thinning of Riparian Reserves has been implemented as part of multi-resource projects, including timber sales, in other land use allocations. In addition trees within Riparian Reserves have been treated to create snags and coarse woody debris. Areas of snag and coarse woody debris creation in the above table include only areas where snags and/or coarse woody debris have been created from timber harvest and stream restoration projects.

Watershed analysis - Watershed analysis is required by the Northwest Forest Plan (NFP) Record of Decision (ROD). Watershed analyses include:

- Analysis of at-risk fish species and stocks, their presence, habitat conditions and restoration needs;
- Descriptions of the landscape over time, including the impacts of humans, their role in shaping the landscape, and the effects of fire;
- The distribution and abundance of species and populations throughout the watershed; and
- Characterization of the geologic and hydrologic conditions.

This information is obtained from a variety of sources, including field inventory and observation, history books, agency records and old maps and survey records. Watershed analysis proceeded at a consistent pace. Coordination occurred between the BLM Eugene District and adjacent BLM Districts, and USFS to assure that watershed analysis in areas of joint ownership had appropriate participation from adjacent Districts or agencies. The current status of the Eugene District watershed analysis is shown in the following table:

Table 10 - Completed Watershed Analysis Areas

	Watershed Analysis Areas	Number of Key Watersheds	BLM Acres	Percent Total Acres
Completed through FY98	18	4	261,831	71%
Remaining FY99+	9	1	105,644	29%
Total	27	5	367,495	100%

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[1] Rescissions Act timber sales resulted in the harvest of approximately 96 acres of Riparian Reserve in the Eugene District. The effect of these Rescissions Act timber sales has been considered in a plan evaluation completed in March 1998.

Note that the similarity in Riparian Reserve and Late-Successional Reserve acres is a coincidence, although there is some overlap (i.e., Riparian Reserve acres within the Late-Successional Reserves).

Table 11 - Summary of Non-flood Watershed Restoration Projects
(Includes Riparian Reserve density management and road decommissioning)

PROJECT	DESCRIPTION	YEAR
Mudd-Lane	Reconstructed a recreation trail to reduce erosion, sedimentation & other impacts; installed and replaced culverts	FY97
McGowan Meadow Restoration	Created barriers to OHV use of the meadow; removed noxious weeds; restored hydrologic functions within the meadow; and girdled young Douglas-fir trees within the meadow	FY97
Gate Creek Stream Restoration	Instream enhancements & riparian vegetation conversion	FY 97
Horse Rock Ridge Fencing	Protection fencing	FY 98
Native Seed Collection	Seed collection	FY 96
Native Seed collection & planting	Seed collection and planting	FY 97
Native Seed collection	Seed collection	FY 98
Noxious Weed removal	Removed Scotch broom on 14 acres	FY 98
Wilson Creek culvert replacement	Fish passage and/or enlarging for 100-year storm event	FY98
Ewing Creek culvert replacement	Fish passage and/or enlarging for 100-year storm event	FY98
Williams Creek culvert replacement	Fish passage and/or enlarging for 100-year storm event	FY98
Buck Creek culvert replacement	Fish passage and/or enlarging for 100-year storm event	FY98
Road decommissioning	Decommissioned or Fully Decommissioned 20.95 miles of road	FY96-FY98
Bottom Line sale	Density management in Riparian Reserves	FY96-FY98
Cedar Creek sale	Density management in Riparian Reserves	FY96-FY98
Squeeze Play	Density management in Riparian Reserves	FY96-FY98
Other density management	Estimate 22 acres of density management in Riparian Reserves - primarily in the Coast Range	FY96-FY98

LATE-SUCCESSIONAL RESERVES AND ASSESSMENTS

Late-Successional Reserve assessments have been completed for all mapped Late-Successional Reserves in the Eugene District. The Oregon Coast Province (Southern Portion) Late-Successional Reserve Assessment addresses the portions of LSR RO267 and RO268 in the Coast Range and South Valley Resource Areas of the Eugene District. The South Cascades Late-Successional Reserve Assessment addresses the portions of LSR 222 in the South Valley Resource Area of the Eugene District. The Regional Ecosystem Office (REO) has reviewed these assessments and found that they provide a sufficient framework and context for projects and activities within the Late-Successional Reserves.

Harvested areas have been reforested in the Late-Successional Reserves following timber sales released in accordance with Sec. 2001(k)(1) of the 1995 Rescissions Act (PL 104-19).

Approximately 6645 acres of young stands within Late-Successional Reserves have been precommercially thinned to control stocking and manage stands (see Table 10). Precommercial thinning in Late-Successional Reserves is addressed more fully in the section on "Timber Resources - Silvicultural Activities." Approximately 315 acres within Late-Successional Reserves have been commercially thinned to benefit the creation of late-Successional forest conditions. In addition trees within Late-Successional Reserves have been treated to create snags and coarse woody debris (see Table 12 below).

Table 12 - Late-Successional Reserve Stand Treatments (# acres treated)

	FY 1995	FY 1996	FY 1997	FY 1998
Precommercial thinning	0	1476	1242	3927
Commercial thinning	31	59	0	225
Coarse woody debris creation	0	0	0	14
Snag creation (# of snags created)	120 (89)	1000 (200)	0	1050 (315)

ADAPTIVE MANAGEMENT AREAS

Central Cascades Adaptive Management Area (CCAMA) - The Eugene District Resource Management Plan contains the CCAMA that was part of President Clinton's Forest Conference and Northwest Forest Plan. Adaptive Management Areas are federal forest lands where the testing of new forest management techniques is encouraged and where communicating and coordinating with local communities and interested groups is emphasized.

A Central Cascades Adaptive Management Area Strategic Guide was completed December 1996. This guide helps interested citizens, communities, and groups by providing key information on ways to encourage learning and seek changes in federal agency natural resource practices and processes. It also is a guide for decision makers that outlines the Central Cascades AMA priorities so time and funding decisions can support these priorities. It also is an adaptive management framework for natural resource managers, researchers, and others who wish to promote needed research, demonstration projects, and management studies to help communities and forests to remain viable and productive.

Table 13 - Central Cascades AMA Land Use Allocations under the Northwest Forest Plan

Land Use Allocations	Acres	Management Goal
Adaptive Management Area	165,541 [148,946 Willamette National Forest, 16,595 Eugene District BLM]	Develop and test technical and social approaches to achieve desired ecological, economic, and social objectives

Interagency cooperation and project planning continues within the CCAMA framework.

MATRIX - 15% ANALYSIS

The NFP/ROD (pg. C-44) and RMP/ROD (pg. 48) require that BLM and USFS provide for the retention of late-successional/old growth fragments in the Matrix where little remains. The Standards and Guidelines are to be applied to any 5th field watershed in which federal forest lands are currently comprised of 15 percent or less Late-Successional Forest (LSF), considering all land allocations. All Eugene District FY95-98 sales sold under the NFP have complied with the 15 percent rule per the initial analysis. In 1996 the Eugene District completed an initial screening of watersheds with the Siuslaw, Umpqua, and Willamette National Forests. General results were reported in the FY97 Eugene Annual Program Summary. The initial analysis applies to all actions with decisions prior to October 1, 1999.

A joint BLM/FS Instruction Memorandum was issued on September 14, 1998. This provided the final guidance for implementing the 15 percent S&G throughout the area covered by the Northwest Forest Plan. Implementation of this guidance is required for all actions with decisions beginning

October 1, 1999. A 15 percent analysis, based on the September '98 guidance, is currently in progress, but overall results will not be available for publication in the FY98 Annual Program Summary. They will be published concurrent with completion of the Eugene 3rd year RMP evaluation in Spring 1999.

AIR QUALITY

All prescribed fire activities were carried out on Matrix LUA and in compliance with the Oregon State Smoke Management Plan, State Implementation Plan, and consistent with the Clean Air Act. No coarse woody debris was consumed while carrying out these treatments. No intrusions occurred into designated areas as a result of prescribed burning activities on the district.

Prescribed fire projects in 1998 were limited to pile burning on 15 areas consisting of 454 acres of machine piles and 11 areas consisting of 82 acres of hand piles burned.

Prescribed fire projects from 1996 thru 1998 consisted of 19 areas of machine pile burns for a total of 606 acres and 11 areas of hand pile burns for a total of 82 acres.

WATER AND SOIL

Over the past 3 years, programmatic water and soil monitoring is primarily composed of stream temperature monitoring, discharge monitoring, and cooperative efforts with watershed councils. The temperature monitoring program has grown from 9 sites on 1996 to 50 sites in 1998. As the result of flood damage and staffing, the number of BLM operated gauging stations has decreased. The BLM is funding the operation of a gauging station with a watershed council. Sediment stations were operated in conjunction with BLM operated gauging stations. The District is engaged in "grab sample" style sediment monitoring for storm water in cooperation with the McKenzie Watershed Council. There are 14 sites that total approximately 42 samples annually.

Number of Temperature Monitoring Stations:	Number of Gauging Stations Operated:
1996 -- 9 sites	1996 -- 4 stations
1997 -- 29 sites	1997 -- 1 station
1998 -- 50 sites	1998 -- 1 station*

* a cooperative agreement with the McKenzie Watershed Council, and funding the operation of a gauging station through the USGS.

Note: The gauging stations were damaged and/or washed out in the February '96 flood. To date, because of expense and priorities, they have not been replaced. In 1998, gauging station data from USGS and State operated stations in the District was compiled. It is anticipated that the data will be processed in FY99.

Number of Sediment Sampling Stations Operated:
1996 -- 4 stations
1997 -- 1 stations
1998 -- 0 stations, *14 sites

*Grab samples for McKenzie Watershed Council cooperative storm water monitoring effort.

Note: When in operation, the sediment sampling was done daily. Therefore, the actual number processed may have approached 550 samples. In 1998, 15 sediment samples were taken in conjunction with the McKenzie Watershed Council storm water monitoring project.

State-Listed Clean Water Act 303(d) Streams. Stream temperature data was provided to the Oregon Department of Environmental Quality (DEQ) for use in developing the draft DEQ 1998 Section 303(d) List of Water Quality Limited Water bodies. Approximately 41 stream segments included on the draft DEQ 1998 Section 303(d) List of Water Quality Limited Water bodies across BLM-administered land in the Eugene District. These 41 State-listed 303(d) segments, identified by the Department of Environmental Quality (DEQ), requires the development of a Total Maximum Daily Load (TMDL) and Water Quality Management Plan (WQMP). The District is the lead for accomplishing TMDLs and WQMPs on federal lands for stream segments (see Table 14).

Table 14 - Summary of Eugene District Streams on the 1998 DEQ Draft 303(d) List

303(d) Stream Segment	Extent	Listing Criteria/ Season	Plan Completion Date
Deadwood Creek	Mouth to headwaters	Habitat Modification	2006
Deadwood Creek	Mouth to headwaters	Temperature-Summer	2006
Eames Creek	Mouth to headwaters	Biological	2006
Lake Creek	Mouth to Congdon Creek	Temperature	2006
Siuslaw River	Mouth to Headwaters	Temperature	2006
Long Tom	Mouth to Headwaters	Bacteria-Water Contact Recreation	2007
Long Tom	Mouth to Headwaters	Temperature - Summer	2007
Long Tom River	Mouth to Fern Ridge Reservoir	Bacteria-Water Contact Recreation	2007
Long Tom River	Mouth to Fern Ridge Reservoir	Temperature-Summer	2007
Fern Ridge Reservoir	Reservoir	Bacteria-Water Contact Recreation	2007
Fern Ridge Reservoir	Reservoir	Turbidity	2007
Calapooia River	Mouth to Brush Creek	Temperature-Summer	2007
Calapooia River	Mouth to Brush Creek	Bacteria-Water Contact Recreation	2007
Calapooia River	Mouth to Brush Creek	Bacteria-Water Contact Recreation	2007
Calapooia River	Mouth to Brush Creek	Dissolved Oxygen (DO)	2007
Fall Creek	Mouth to Fall Creek Reservoir	Temperature-Summer	2005
Fall Creek	Fall Creek Reservoir to headwaters	Temperature-Summer	2005
Horse Creek	Mouth to Eugene Creek	Temperature-Bull Trout-Summer	2005
McKenzie River	Mouth to Ritchie Creek	Temperature-Summer	2005
McKenzie River	Ritchie Creek to SF McKenzie River	Temperature - Bull Trout - Summer	2005
McKenzie River	Mouth to Leaburg Dam	Temperature-Summer	2005
McKenzie River	Leaburg Dam to S Fk McKenzie	Temperature-Summer-Fall	2005
MF Willamette River	Mouth to Dexter Lake	Temperature-Summer	2005
Mill Creek	Mouth to Headwaters	Temperature-Summer	2005
Willamette River	Santiam River to Calapooia	Temperature-Summer	2007
Willamette River	Calapooia River to Long Tom	Bacteria-Water Contact Recreation	2007
Willamette River	Calapooia River to Long Tom	Temperature-Summer	2007
Willamette River	Long Tom River to McKenzie	Temperature-Summer	2007
Willamette River	Santiam River to Calapooia	Bacteria-Water Contact Recreation	2007
Winberry Creek	Mouth to North/South	Temperature-Summer	2005
Siuslaw River	Mouth to headwaters	Temperature-Summer	2006
Coast Fork of Willamette	Mouth to Cottage Grove Reservoir	Temperature-Summer	2007
Coast Fork of Willamette	Mouth to Cottage Grove Reservoir	Bacteria-Water Contact Recreation	2007
Coast Fork of Willamette	Mouth to Cottage Grove Res.	Bacteria--Water Contact Recreation	2007
Cottage Grove Reservoir	Reservoir	Toxics--Tissue and Water--mercury	2007
Row River	Mouth to Dorena Reservoir	Temperature - Summer	2007
Laying Creek	Mouth to Saltpeter Creek	Temperature--Summer	2007
Coyote Creek	Mouth Headwaters	Dissolved Oxygen--Cool Water Aquatic L.	2007
Coyote Creek	Mouth to Headwaters	Bacteria--Water Contact Recreation	2007
Siuslaw River, South Fork	Mouth to Kely Creek	Biological	2006
Mohawk River	Mouth to Headwaters	Temperature--Summer	2005

The 303(d) listed streams have been included in the site prioritization for the temperature monitoring. To date, no water quality management plans or TMDL allocations have been initiated.

Municipal watersheds - The following community watersheds are located within the EugeneDistrict. Numerous domestic and irrigation water rights are located downstream from BLM administered lands.

Table 15 - Community Watersheds in the Eugene District

Watershed Name	System Name	Population Served	Filtered (Y/N)	Acres (BLM)	Acres (Other)	Acres (Total)
McKenzie River	EWEB	84,750	Y	25,910	820,863	846,773
Laying Creek	City of Cottage Grove	8000	Y	107	37,059	37,166
Row River	City of Cottage Grove	8000	Y	37,209	160,503	19,7712
Prather Creek	City of Cottage Grove	8000	Y	0	3,737	3,737
Beaver Creek	London Water Co-op	50	Y	211	524	735
Long Tom River	City of Monroe	485	Y	19,117	232,223	251,340

Updated Stream Information: The District has accumulated updated stream information in the form of stream location surveys conducted in the pre-sale phase. Currently an effort is being made to enter this information into GIS.

The District also has gauging station data and sediment data from the late 1980s and early 1990. An effort has been initiated to compile and analyze this information.

Use of Best Management Practices - Ground-based yarding and the associated Best Management Practices (designated skid trails on 10 percent or less of this ground, 25 percent soil moisture, and subsoiling of the skid trails) occurred on roughly 525 acres during FY 96, 97, and 98. This will not exceed the commitment to less than 1 percent soil productivity loss for the treatment areas.

Sediment Monitoring - Road sediment rates were monitored and analyzed on 75 research plots during FY 96, 97, and 98 in the Coast Range of the Eugene District through a cooperative research project with the USFS Rocky Mountain Research Station. A companion study to this evaluated travel distances through hill slope vegetation below relief culverts. Sediment rates from these roads were less than one half of the rates predicted by the Washington State Board of Forestry methodology (TFW) approved for federal watershed analysis. The research will continue through FY 99 and the TFW model will be recalibrated to more accurately reflect these actual rates.

Road Related Analysis and Studies - During FY 96, 97, and 98 roads were analyzed during watershed analysis on approximately 793,000 acres for their ability to generate sediment and their connectivity to the stream channel system. Sediment production rates were compared to a calculated natural background rate.

The Washington State Forest Practices Board methodology was utilized as suggested in the guidelines for federal watershed analysis.

The road inventories and subsequent sediment analysis included all public and private roads within the watershed either through a sampling process or through 100 percent inventory. Roughly one half of the acreage and road mileage analyzed was BLM public land, while the other half was private land to gain a watershed-wide understanding of impacts relative to natural background levels of sediment for the whole watershed. Increases were detected over the natural background levels ranging from 5 to 20 percent using the Washington State methodology and, adjusted with the above sediment monitoring date, are ranging 2 to 10 percent. These rates are very minor relative to natural fluctuations.

WILDLIFE HABITAT

Retention Trees On A Post Regeneration Harvest Area

In 1995 the District created 75 snags within the Matrix land use allocation, and developed a snag creation project involving 625 trees on 417 acres within the Mohawk and McGowan Watershed. The District also top-girdled 185 green trees in 260 acres of second-growth habitat in the Perkins Creek and Wildwood Falls areas to improve stand structural diversity.

In 1996 Eugene District created 160 snags within Late-Successional Reserves in the Swamp Creek, Steinhauer Creek, and Triangle Lake areas. The District created 1,500 snags within the Matrix Land Use allocation in the Mohawk/McGowan Watershed and 40 snags within the Matrix Land Use allocation in the Poole Creek area. The District in cooperation with NCASI completed work in the Vida/McKenzie and Mohawk/McGowan watersheds to determine the relative amount and distribution of snags and coarse woody material. The District developed a snag creation plan for the McKenzie Resource Area for future opportunities.

In 1997 the District created over 80 wildlife structures on 800 acres of mid seral and mature forest stands, including cavities, bat flanges, marten dens, eagle perches and platforms, and bear hibernacula, created 1,500 snags within the Mohawk/McGowan Watershed, and monitored the conditions of 1,141 snags, created between 1982 and 1996, to determine uses and decay development.

In 1998 the District created 1,300 snags on 984 acres within the Matrix Land Use allocation within the Mohawk/McGowan Watershed, and treated 100 acres in the Bottom Line Density Management to create cavities for species that nest in secondary cavities. The District enhanced 200 acres of upland habitat by adding coarse woody debris from other sites. The District created 78 wildlife structures in standing live trees and down logs on 200 acres within the Late-Successional Reserve Land use allocation. These structures included artifical nest platforms for osprey and bald eagles, cavities for species ranging from black bears to tree swallows, bat roost crevices, and other structures that could be utilized by species from insects to large mammals. The District created 350 snags and 870 additional wildlife structures (artificial cavities, bat roots, amphibian refugia and mammal dens) in several areas within the Late-Successional Reserve Land use allocation. The District began work on 130 acres of snag creation and residual tree development in the Haight Creek Late-Successional Reserve (to be completed in 1999).

The District thinned <25 year-old forest plantations to 20x20 spacing and released individual trees on

344 acres (4 trees/acre) within <40 year-old forest stands to develop late-successional forest conditions in this area. The District topped danger snags in rights-of-way within the Late-Successional Reserve to provide down wood and maintain portions of snags that no longer threaten public safety. **For a discussion on Green Tree Retention, Snags and Snag Recruitment, and Coarse Woody Debris Retention and Recruitment, see page 53 "Monitoring Results and Findings".**

SPECIAL HABITATS - *The District is to identify special habitats, determine the need for their protection or management and implement needed management practices. The District also is to maintain, enhance, and acquire oak and oak-conifer woodlands, and pine stands, and maintain these sites within the range of known historical conditions. To maintain wildlife uses, the District is to buffer ponds and lakes, bogs and swamps, meadows, rock gardens, rock outcrops and talus, caves, rock overhangs, mines, man-made structures and mineral deposits from other land uses.*

During 1995 the District identified historic oak woodlands and management opportunities, including key areas for the use of prescribed fire within the Row River Watershed (55,000 acres), and evaluated the condition of riparian and wetland habitats on 1,100 acres within that watershed.

In 1998 the District mapped 100 wetlands, completed 2 site restoration plans, and developed 2 others for the West Eugene Wetlands.

During the past 3 years the District, working with the West Eugene Wetlands Partnership to implement the West Eugene Wetlands Plan, acquired 698 acres of wetlands and associated habitats, including oak woodland habitats.

The District is taking actions to identify, protect, and enhance special habitats.

NEST SITES, ACTIVITY CENTERS, AND ROOKERIES - *To maintain raptor species, the District is to retain nests, centers of activity, prey concentrations or foraging areas, and roost sites, to the extent compatible with land use allocations, and install structures to enhance habitats. For raptors and great blue herons, the District is to restrict activities within 0.25 mile (0.5 mile line-of-sight) of active nest sites during critical nesting periods, and implement other protective management practices that are compatible with land use allocations.*

Between 1996 and 1998 the District, in cooperation with volunteers and the Oregon Department of Fish and Wildlife, updated more than 50 osprey nest site locations, monitored an osprey nest site at Hult Pond, and searched historical osprey nest sites around Triangle Lake. The District monitored 2 successful kestrel nests in nest boxes in the West Eugene Wetlands area and surveyed a 22-mile road transect for pygmy owls. The District monitored nesting activity at 2 goshawk nest sites, first located in 1995, expanding this effort in 1997 to survey 6,000 acres near the nest sites. No new goshawk nests were found during the 1997 survey. However, that year the District located an new active goshawk nest in mid seral-stage forest habitat and deferred a planned timber sale for at least 2 years so that nesting activity could be monitored and the importance of the site for future nesting determined. This nest was again active in 1998. In 1998 the District located a fourth goshawk nest in mid seral-stage forest habitat with a planned timber sale. A decision on this sale is pending.

In 1996 District staff located a Cooper's hawk nest inside the Aim High timber sale and restricted timber harvest activities to protect the site.

ELK HABITAT - *The District is to cooperate with the Oregon Department of Fish and Wildlife, to the extent compatible with land use allocations, to meet the objectives of the Elk Management Plan, protect crucial habitats, close and rehabilitate roads that are unneeded for resource management or use, avoid constructing roads in areas of high elk value, use seasonal restrictions to minimize disturbances and harassment, and conduct forage seeding where compatible with other management objectives.*

In 1995 the District closed or rehabilitated 11 roads to enhance big game habitat, and established road closure objectives for the Row River Watershed (55,000 acres). During 1996 the District developed within timber sales plans to decommission nonessential roads, and closed 5 to 10 miles of existing roads to enhance big game habitat. The District, with the assistance of Oregon Department of Fish and Wildlife, also took the first steps to address road management issues within the Siuslaw Elk Management Area, developing a map of roads to evaluate for reduced access considerations. The District completed an elk habitat and transportation analysis for the Cottage Grove/Big River Watershed Analysis area. In 1997 the District developed plans to decommission nonessential roads, and closed 20 miles of roads to enhance big game habitat. The District limited roads in Elk Emphasis areas.

LATE-SUCCESSIONAL RESERVE HABITAT IMPROVEMENT - *The District is to manage late seral habitats within Late-Successional Reserves and all other land use allocations to maintain regionally viable populations of the species that depend on late seral habitats.*

In 1995 the District completed an analysis of late-successional habitats in the Row River Watershed (55,000 acres) and evaluated habitat conditions in 7 stands of Late-Successional Forest in the Upper Siuslaw Watershed.

During 1996 the District, the Siuslaw National Forest, and the Fish and Wildlife Service completed the Coast Range Province - Southern Portion Late-Successional Reserve Plan for LSRs RO267 and RO268. This plan covered 550,000 acres shared by the Forest Service and BLM, and listed a variety of management actions, including silviculture prescriptions, to improve or maintain the habitats of old growth-dependant wildlife species. The District, in cooperation with NCASI, completed work in the Vida/McKenzie and Mohawk/McGowan watersheds to determine the relative amount and distribution of snags and coarse woody material. The District created 160 snags within Late-Successional Reserves in the Swamp Creek, Steinhauer Creek and Triangle Lake areas.

In 1997 the District completed the Big River/Cottage Grove watershed analysis with guidelines for the management of Late-Successional Reserve habitat, and monitored 5,500 acres of the Late-Successional Reserve for carnivores and furbearers to protocol standards using camera sets. The District evaluated 1,500 acres of the Late-Successional Reserve to develop management strategies. The District built cavities and other habitat structures on 100 acres Late-Successional Reserve habitat and restored coarse woody debris in 5 locations.

FISH HABITAT & HABITAT MANAGEMENT PLANS

Habitat Management Plans - Habitat Management Plans have been completed for Lake Creek and Upper Siuslaw River. Both are being implemented.

Cooperative Efforts - The District has cooperated with the State of Oregon, Weyerhaeuser Corporation, Roseburg Forest Products, Willamette Industries, Lane County, U. S. Forest Service, and other private landowners in habitat inventory and project implementation. Fisheries project work is also coordinated through Watershed Councils. Monitoring and evaluation of habitat and habitat projects is conducted in cooperation with the State of Oregon, Oregon State University, and other Federal agencies.
The District has utilized a variety of volunteers to assist in all aspects of the Fisheries program.

Information Gathering - The District utilizes a variety of data gathering methods to assess habitat, fish populations, and the effectiveness of management activities. In addition to the operation of a smolt screw trap for the past 4 spring out migration seasons, the District has completed the following data collections:

Table 16 - Data Collection

	1995	1996	1997	1998
Miles of Inventory	6	3	60	125
Miles Spawning Counts	65	95	95	135
Juvenile Sample Sites	10	10	30	55
Sites Snorkeled	0	15	30	50
Riparian Inventory	7	4	65	130

Restoration Activities - The District initiated habitat restoration efforts in 1969, and has continued to implement a program of stream channel, riparian, and upslope restoration. Restoration activities have occurred throughout the District, but most have been in coastal streams. Two major passage projects have been implemented: Fish ladders at Lake Creek Falls in 1989 and at Hult Pond Dam in 1997. Additional work to improve passage and repair flood damage at Lake Creek Falls was implemented in 1996.

Example of one of the many fish habitat improvement projects

Other restoration activities include: Additional road maintenance and repair, culvert removal, and road closures were completed that benefit aquatic habitat.

Table 17 - Other Restoration Data

	1995	1996	1997	1998
Miles of Channel Restored		6	5	7
Acres of Riparian Restored	125	200	45	60
Acres of Riparian Maintained	40	150	350	350
Fish Passage Culvert Replacement	10	1	10	13

SPECIAL STATUS AQUATIC SPECIES

No fish or invertebrates are listed as SEIS Special Attention Species.

At the end of FY 1998, 4 species of fish in the District were listed as threatened or endangered: Oregon chub, coastal coho salmon, bull trout, and Umpqua cutthroat trout. Two species are currently proposed for listing: Willamette spring chinook and Willamette winter steelhead. Coastal steelhead, cutthroat trout, and coastal chinook are currently in status review. Since most of the waters in the District contain species that are listed, proposed, or in status review Special Status species are included in all habitat-related activities including inventory, monitoring, restoration, and evaluation.

The Eugene District participates in formal and informal recovery efforts for the Oregon chub. Statutory and policy guidelines for Conferencing and Consultation, review by Level 1 Provincial Teams, and recovery efforts are followed for District actions that may affect 5 listed salmonid species.

SPECIAL STATUS AND SEIS SPECIAL ATTENTION SPECIES (Animals)

ENDANGERED, THREATENED, AND PROPOSED SPECIES - *All actions done or authorized by the District are to be consistent with regional conservation measures and recovery objectives. When necessary, the District is to survey project areas for uses by federally listed and proposed species and attempt to mitigate projects to the level where they will have no effect on those species. In "may affect" situations, the District must meet the requirements of the Endangered Species Act (ESA) and associated regulations. The District is to manage species and habitats proposed for federal listing at the level of protection provided to listed species and Critical Habitat, respectively.*

Since 1995 the District has participated in inter-agency reviews and consultations to help ensure that all proposed actions are consistent with regional conservation strategies and land use plans, and to mitigate or eliminate the potential impacts of those actions on federally listed and proposed species and their habitats. These processes include preplanning sessions with the Fish and Wildlife Service (FWS) to review proposed projects at the still-conceptual stage of development and incorporate mitigation measures to eliminate or reduce potential impacts. All proposed projects that "may affect" federally listed or proposed species, or their habitats, are formally reviewed by interagency teams of biologists from the BLM, FWS, and Forest Service. These teams ensure that all proposed projects are consistent with pertinent land use plans and recovery strategies, and that potential adverse impacts to species and habitats are mitigated to the extent possible. The District continues to comply with all requirements of the ESA and associated regulations, and helps the FWS develop and track habitat and population baselines for listed and proposed species.

The **Fender's blue butterfly** (known to occur) and the **Canada lynx** (unlikely to occur) are the only 2 terrestrial wildlife species in the District that are proposed for federal listing. Between 1995 and 1998 the District assisted The Nature Conservancy and the University of Washington with surveys for Fender's blue butterfly on approximately 100 acres in the West Eugene Wetlands Project Area, completed habitat restoration projects, and developed with The Nature Conservancy a management strategy for 760 acres of habitat in the Coburg Hills. The District also completed all needed project consultations with the FWS. The Canada lynx is unlikely to occur on District lands and District actions are not likely to affect this species; the FWS recommended no surveys or management actions by the District.

Columbian white-tailed deer - *The District is to ensure that all actions are consistent with the objectives of the recovery plan, and assess the potential for establishing an experimental population in the District.*

Columbian white-tailed deer are not known or suspected to occur in the District and the FWS currently does not support reintroducing this species to District-administered lands. However, the District Fish and Widlife 2000 strategy identified the acquisition of wet meadows and oak woodlands by the District as actions that eventually would contribute to maintaining viable regional populations of white-tailed deer. During 1995-1997 the District acquired 587 acres of wet meadow and oak woodland habitat through the West Eugene Wetlands project.

American peregrine falcon - *The District is to comply with regional recovery plans, promote species recovery, evaluate the suitability of local habitat conditions, determine if historical aeries are suitable for nesting, manage sites for occupancy and recovery, and retain recovery sites in federal ownership.*

No active aeries are known to exist within the boundaries of the District. In 1996 the District surveyed 5 potential nest sites and one historic aerie on Black Butte. The District analyzed past monitoring data and determined that Black Butte no longer supported nesting peregrine falcons; the District discontinued annual surveys of this site until habitat conditions improved or regional populations increased.

In 1997 the District and the Oregon Department of Fish and Wildlife evaluated the suitability of the only other historic site in the District, on the Coburg Hills Rocks, for nesting peregrine falcons and completed surveys of the remaining potential nesting habitats in the District. The District found no evidence of nesting and no high-potential recovery habitat.

In 1998 the District adopted management guidelines for any newly-discovered peregrine falcon aerie and agreed to prepare a site management plan for any newly-found nest site within one year of its discovery. These steps were recommended by the interagency team and are consistent with regional recovery plans.

Northern spotted owl - *The District is to implement still-pertinent actions of the draft recovery plan, participate in regional research, monitoring and management efforts, maintain owl core areas within the Matrix land use allocation (unmapped LSRs), and restrict tree falling and other actions within 0.25 mile of nest sites during critical nesting periods.*

In 1995 the District, in cooperation with the Oregon State University Cooperative Wildlife Research Unit, surveyed spotted owls on 353,000 acres within the Central Coast Range demographic and density study areas. The cooperators surveyed 53 owl sites, completing the sixth year of the cooperative study. The District monitored 62 spotted owl sites in the South Valley Resource Area and surveyed all proposed 1995 and 1996 timber sales. The District also completed the fourth year of the McKenzie Resource Area/National Council of the Paper Industry for Air and Stream Improvement (NCASI) demographic study, monitoring 100 calling areas.

The following year, the District monitored 152 known owl nest sites and surveyed proposed timber sale areas, coordinating this work with the Pacific Northwest Experimental Station (PNW) that began validation monitoring on 32 sites in the northern portion of the Coast Range Resource Area. The District completed the final year of the McKenzie/NCASI demographic study, monitoring 100 calling areas.

In 1997 the District monitored 35 spotted owl sites in the Cascade Range and surveyed all proposed 1997, 1998, 1999, and 2000 timber sales. In cooperation with the PNW, the District continued demographic monitoring in the Coast Range and coordinated the monitoring of sale-affected sites with private consultants. The District received and archived records for 41 sites, and monitored

66,000 acres of habitat. In 1998 the District monitored more than 100 spotted owl nest sites.

In 1996 the District, Forest Service, and FWS completed the Coast Range Province - Southern Portion Late-Successional Reserve Assessment for lands including the Coast Range Resource Area and part of the South Valley Resource Area. This plan listed a variety of management actions, including silviculture prescriptions, to improve or maintain habitat for old growth-dependant species, including the northern spotted owl. In 1997 the District completed the Big River/Cottage Grove watershed analysis with guidelines for the management of late-Successional reserve habitat.

The District prohibits timber treatments and other habitat modifications within 0.25 mile of owl nests, or the activity center of any known pair, between March 1 and June 30 of any year. After June 30 such activities may occur within these areas for the reasons described in the annual programmatic "habitat modification" biological assessments that are prepared by the interagency teams for the North Coast and Willamette provinces. The District permits certain activities within 0.25 mile of suitable habitat that could disturb nesting owls during critical breeding periods for the reasons described in the annual programmatic "disturbance-only" biological assessments that are prepared by the interagency teams for the North Coast and Willamette provinces. However, the District continues to monitor activity centers and prohibits such actions if they occur within 0.25 mile of an active nest. The District consults with the FWS on these actions, and complies with the conservation recommendations and the terms and conditions provided by the FWS in the associated biological opinions.

In 1997 the District, as part of an interagency team that included representatives of the FWS, evaluated the anticipated impacts of proposed timber management actions on the availability and juxtapositions of spotted owl habitats within the "South Valley Corridor." This corridor is comprised mainly of lands in the Connectivity LUA. The corridor is suspected to serve as one of the principal pathways in western Oregon for spotted owl movements between the LSRs of the Cascade Mountains and the Coast Range. The purpose of the analysis was to ensure that proposed timber management actions would not harm the utility of this critical pathway for owl dispersal. Details of the analysis are contained in the biological assessment of habitat modification projects proposed in the Willamette Province during 1998. The analysis concluded that, between 1995 and 2004, the availability of suitable and dispersal habitats in this corridor would increase from 15.23 to 15.64 percent, and from 39.79 to 48.92 percent, respectively, the juxtaposition of these habitats for spotted owl dispersal would not be compromised, and owl dispersal would continue. The FWS concurred with these conclusions in its associated biological opinion.

Marbled murrelet - *The District is to survey potential habitat prior to any disturbance, protect all contiguous existing or recruitment habitat within 0.5 mile of sites where murrelet behavior indicates occupancy, manage these areas as LSR, protect or enhance suitable or replacement habitat in these areas during silviculture treatments, restrict actions that might disturb murrelets during critical nesting periods, and incorporate the conservation and management strategies of the recovery plan into District plans and actions.*

The District contains about 28,700 acres of potential murrelet habitat, or 8 percent of all BLM-administered lands in Oregon. During 1995 the District completed protocol surveys of 34 marbled murrelet habitat sites identified near or within proposed project areas. Twenty-two of these sites had been surveyed for two or more years. Six sites showed occupancy or presence by marbled murrelets. In 1996 the District completed protocol surveys of 14 marbled murrelet habitat sites identified near or within proposed project areas. Nine of these sites had been surveyed for two or more years. Four sites showed occupancy or presence. In 1997 the District completed protocol surveys of 13 sites in the Coast Range and South Valley Resource Areas for marbled murrelets. Six of those sites either had been occupied in the past or newly documented as occupied. The District documented presence at one site; the remainder had no detections.

Surveys continued during 1998. The District currently has 19 occupied sites which are managed as part of the LSR. One of these reserves involved the conversion of 120 acres of Matrix to LSR.

In 1997 and 1998 the District demonstrated the uses of radar to biologists from several west-side

BLM Districts. The District tested the utility of this equipment to monitor gross movements of marbled murrelets. This work was instrumental in fostering on-going research of this technology.

In 1996 the District, the Forest Service, and the FWS, completed the Coast Range Province - Southern Portion Late-Successional Reserve Plan for lands including the Coast Range Resource Area and part of the South Valley Resource Area. This plan listed a variety of management actions, including silviculture prescriptions, to improve or maintain habitat for old growth-dependant species, including the marbled murrelet.

The District prohibits treatments that would occur within 0.25 mile of an occupied murrelet site between April 1 and August 5 of each year. To avoid disturbances to nesting murrelets, all activities within 0.25 mile of occupied or unsurveyed suitable habitat between April 1 and September 15 are prohibited until 2 hours after sunrise and must end 2 hours before sunset. The District consults with the FWS on these actions, and complies with the conservation recommendations and the terms and conditions provided by the FWS in the associated biological opinions. These actions include the mitigation measures identified in the murrelet recovery plan (Fish and Wildl. Serv. 1997).

Bald eagle - Eugene RMP/ROD designated 194 reserves for the conservation and recovery of bald eagles. These reserves are called bald eagle habitat areas (BEHAs) and total 7,908 acres. *The District is to comply with regional recovery plans and site-specific plans, and cooperate in recovery actions, write site management plans for District-designated bald eagle habitat areas (BEHAs), develop site plans for occupied habitats not within BEHAs, manage the Coburg Hills bald eagle complex for eagle conservation and recovery and write a site management plan that addresses threats to eagles from roads and the development of adjacent non-federal lands, identify alternative food sources, and prohibit operations within 400 m (800 m line-of-sight) of nests and roosts during critical nesting and wintering periods.*

The Pacific Bald Eagle Recovery Plan (U.S. Fish. Wildl. Serv. 1986) identifies 5 recovery tasks for the BLM in the Willamette Basin and Oregon Coast recovery zones. The Working Implementation Plan for Bald Eagle Recovery in Oregon and Washington (Bald Eagle Working Team for Ore. and Wash. 1990) lists 15 additional tasks that require BLM cooperation to meet recovery goals for populations in Oregon and Washington.

The District and the Oregon Cooperative Wildlife Research Unit (Oregon State University) surveyed potential Bald Eagle habitat areas on the District in 1989 and 1990. Based on these surveys, the District identified 2 communal winter roosts in the Coburg Hills and individual perch trees near Dorena Reservoir. The District prepared site plans for the Dorena and Jones Swamp nest sites. The District also delineated 24 District Reserves (BEHAs), containing a total of 5,829 acres for bald eagle conservation and recovery. In 1998 the District developed a site management plan for 21 of these sites covering 5,106 acres. This site plan addressed threats from roads and the development of adjacent lands. The District continues to record incidental sightings, participates in the annual Mid-winter Bald Eagle Survey, and annually monitors the known nests on the District.

The District prohibits actions within 0.25 mile (0.5 mile line-of-site) of bald eagles nests between January 1 and August 31 of each year and restricts public access to the known nest territories. All District management actions are consistent with the Pacific Bald Eagle Recovery Plan.

The District consults with the FWS on all actions that might affect bald eagles, and complies with the conservation recommendations and the terms and conditions provided by the FWS in the associated biological opinions. The District continues to work through the interagency team to avoid adverse impacts to bald eagles.

Candidate and Sensitive Species - *The District is to assess the distributions, abundance, ecology, and potential impacts to Candidate and Bureau sensitive species, avoid contributing to the need to list Candidate, State sensitive and Bureau sensitive species, and protect sites used by roosting bats.*

To organize all published and anecdotal information on Candidate and Sensitive invertebrate species that were known or suspected to occur in the District, the District in 1995 prepared *Special Status and Special Attention Invertebrates of the Eugene District*. This document has served as a guide for several BLM Districts and FS National Forests to begin addressing sensitive invertebrate species.

In 1995 the District updated *Special Status Amphibians and Reptiles of the Eugene District: a Guide to Their Conservation*. The District surveyed numerous stream and riparian habitats in the Coast Range for tailed frogs and other amphibians to help determine distributions. The District restored 5 acres of habitat for the Northwestern Pond Turtle in the West Eugene Wetlands Project area. During 1996 the District worked with the Joint Western Pond Turtle/Painted Turtle Working Group to produce the draft Western Pond Turtle Survey and Monitoring Plan, and with the Pacific Northwest Amphibian and Reptile Consortium (PNARC) to develop a survey protocol for pond-breeding amphibians. District staff assisted with a training module presented at Oregon State University by PNARC.

During 1995-1997 the District surveyed more than 100,000 acres in the Mohawk Watershed for bats in cooperation with Willamette Industries and Weyerhaeuser Company, and more than 100,000 acres in the McKenzie/Vida and Fall Creek Watersheds in cooperation with Weyerhaeuser and Oregon State University. The District surveyed 12 bridges as part of a cooperative study with the Siuslaw National Forest and Oregon State University. A model of habitat parameters for these bat species was initiated with the information collected. Bat species and numbers were recorded for each bridge site and included several sensitive species. The District has found no bat roosts or hibernacula on District-administered lands. In 1998 the District monitored 76 snags for bat usage. Using a snag model based on deformities, aspect, and other criteria the District determined snag structures that were fit or unfit for bat roosts.

During 1997 and 1998 the District surveyed 6,700 acres for martens and fishers using automated cameras. No martens or fishers were detected. The District also surveyed Marten Creek, Bear Creek, North Fork Fall Creek, and Gale Creek for breeding harlequin ducks, and 14 miles of the McKenzie River for harlequin duck broods. Three District biologists participated in harlequin surveys in the Salem District to learn the survey protocol and become familiar with habitat.

The District established 5 nesting structures for Purple Martins, one in cooperation with the West Eugene Wetlands Project and 4 on Bear Creek (Coast Fork of the Willamette River) in cooperation with the Oregon Department of Fish and Wildlife and private landowners. The District also monitored 2 existing nest box installation areas near Lorane for occupancy.

Survey and Manage Species - *Beginning in 1997 the District is to manage known sites of* Deroceras hesperium, Megomphix hemphilli, Prophysaon coeruleum, *and* Proshysaon dubium. *Beginning in 1999 the District is to complete surveys prior to ground disturbing activities and manage sites for these 4 species and the red tree vole.*

The Eugene District has been able to implement the management/action direction associated with Survey & Manage/Protection Buffer species through fiscal year 1998. The adaptive management application of the experience gained in implementing this management action/direction has resulted in the consideration of possible adjustments (see Appendix 4). The information in the Annual Program Summary for Survey and Manage/Protection Buffer species is not meant to be comprehensive or exhaustive.

Beginning in 1995, the District helped develop an interagency protocol for the survey of Red Tree-voles. District staff also served on the Survey and Manage Mollusk, and the Survey and Manage Amphibian, subgroups to develop interagency survey protocols and management guidelines. The District initiated a teaching collection of shells and a slide library of most local snail species, and regional wildlife biologists and botanists began receiving training on the identification of mollusk genera.

The District surveyed approximately 500 acres for *Megomphix* in 1995. In 1996 the District tested a precursor to the protocol for the Oregon *Megomphix* on timber sales in the Coast Range and South

Valley Resource Areas, and implemented actions to maintain this snail in 2 timber sales. The District began a monitoring study, involving 32 GPS-located stations, to evaluate the reaction of this snail to timber harvest. During 1997 the District identified 5 Oregon *Megomphix* sites and one blue grey tail-dropper site.

During 1996 the District surveyed for red tree voles on 1,535 acres in 24 timber sale areas and delineated vole habitat by walking transect routes (85 miles). Ten active vole sites were confirmed. The District developed a database for red tree vole information, and recorded survey areas and occupied areas on ARC INFO. (In November 1996 the BLM and Forest Service issued guidance for the survey and management of red tree voles that defined criteria for determining when vole surveys are needed (see Appendix 1). Since that time no proposed projects in the District have met these criteria.)

During 1998 the District completed surveys for the 4 mollusk species in all proposed 1999 project areas. The District currently is developing management strategies for proposed projects that would affect known locations.

Through the summer of 1998, the District located 842 known mollusk sites. These include 433 known sites of the Oregon megomphix, 349 sites of the blue-gray tail-dropper, and 121 sites of the papillose tail-dropper.

Protection Buffer Species - *BLM and Forest Service policy recommends that the District conduct habitat surveys for the great grey owl prior to implementing projects within the LSR; however, no surveys are required. (In June 1996 the RIEC moved the Canada lynx from Component 2 to Component 3, eliminating the requirement for surveys by the District (see Appendix 1). In June 1998 the FWS proposed the Canada lynx for federal listing. In accordance with BLM policy, therefore, the District currently manages the Canada lynx as if it were a threatened species.)*

During 1997 the District surveyed a proposed 100-acre timber sale area for great grey owls. With this exception the District has not surveyed for great grey owls or Canada lynx.

SPECIAL STATUS AND SEIS SPECIAL ATTENTION SPECIES (Plants)

The Eugene District has been able to implement the management/action direction associated with Survey & Manage/Protection Buffer species through fiscal year 1998. The adaptive management application of the experience gained in implementing this management action/direction has resulted in the consideration of possible adjustments (see Appendix 4). The information in the Annual Program Summary for Survey and Manage/Protection Buffer species is not meant to be comprehensive or exhaustive.

Surveys, Monitoring, Consultation, and Restoration: Surveys for Special Status (SS) and Special Attention (SA) species are being conducted prior to all ground disturbing activities. Over 15,000 acres have been surveyed for SS species between 1996 - 1998. Surveys for SA species started in FY98 for those ground disturbing projects to be implemented in FY99. Surveys for SA species have also been implemented in selected areas as part of BLM's Challenge Cost Share Program. Eight SS plants are monitored on an annual basis to determine population trends. The total number of SS plant sites known to occur on public lands within the District at the end of 1998 are presented in Table 18. The total number of SA plant sites are presented in Table 19. There are a total of 259 SS plant sites and 177 SA plant sites.

Table 18 - Total Number of Special Status Plant Sites By Species Group

Species Group	Federally Listed or Proposed for Listing	Federal Candidate	Bureau Sensitive	Assessment	Tracking
Fungi	0	0	0	0	1
Lichens	0	0	0	1	3
Bryophytes	0	0	0	2	0
Vascular Plants	14	0	136	4	98

Table 19 - Total Number of Special Attention Plant Sites By Species Group

Species Group	Protection Buffer	Survey & Manage 1	Survey & Manage 2	*Survey & Manage 3	*Survey & Manage 4
Fungi	17	60	2	NA	NA
Lichens	0	23	2	NA	NA
Bryophytes	13	0	0	NA	NA
Vascular Plants	0	30	30	NA	NA

*Inventory for these species will be conducted through general and regional surveys.

Informal Consultation was initiated for three SS plants where restoration activities, including prescribed burning and noxious weed control, were implemented to benefit these species. Two Conservation Strategies have been completed and two more are in preparation.

Survey and Manage Overview (Special Attention Species) - There are approximately 400 species listed in Table C-3 in the Northwest Forest Plan Record of Decision (pp. C-49 - C-61). These species are known as Survey and Manage Species and each has management strategies in the Northwest Forest Plan Record of Decision. Information to carry out the various strategies has been under development through the Regional Ecosystem Office (REO) with the help of species experts from throughout the Northwest. Draft management recommendations and survey strategies for these species are in various stages of development. Several of these have been completed and are currently in use.

SPECIAL AREAS

Wild & Scenic Eligible Rivers - All proposed actions in close proximity to eligible or suitable wild and scenic rivers are evaluated for potential affects upon the Outstandingly Remarkable Values (ORV) that caused the river to be eligible for inclusion in the National Wild and Scenic Rivers System. Three suitable and seven eligible river segments remain in interim protected status pending further study or Congressional or Secretarial action. There have been no management actions adversely affecting the status of the ORVs for these rivers.

Table 20 - Wild And Scenic Rivers Status

RIVER SEGMENT NAME	STATUS/CLASS	ORV
Siuslaw River - Segment B	Suitable/Recreational	Fish, Wildlife
Siuslaw River - Segment C	Suitable/Recreational	Recreation, Wildlife
McKenzie River - Segment A	Suitable/Recreational	Fish, Recreation, Scenery
Fall Creek	Eligible/Recreational	Fish
Nelson Creek	Eligible/Recreational	Fish
Willamette River	Eligible	State Greenway
Lake Creek - Segment B	Eligible/Recreational	Recreation, Fish
McKenzie River - Segment B	Eligible/Recreational	Fish, Recreation, Wildlife, Scenery
North Fork Gate Creek	Eligible/Recreational	Fish
South Fork Gate Creek	Eligible/Recreational	Fish

Research Natural Area / Area of Critical Environmental Concern (RNA /ACEC) - Three of the Eugene District's special areas were impacted during FY 1998 by unauthorized recreational uses. The Horserock Ridge ACEC/RNA was damaged by unauthorized off-road vehicle use, resulting in displacement of thin topsoil in narrow tracks down to bedrock. Access points were subsequently posted and physically blocked. Since the exclosure actions in the summer of FY 1998, there has been no additional off-road vehicle related impacts.

Defensibility monitoring has been conducted on targeted ACEC/RNAs. Inappropriate Off Highway Vehicle (OHV) use has been controlled by closing roads, installing fences, signing and patrolling areas. Noxious weed control has also been occurring. Ecological work has included monitoring of rare plants, inventory and assessment, and management treatments implemented on selected areas to enhance habitat features.

The Cougar Mountain ACEC was crossed by an unauthorized mountain bicycle event that created a new race course/trail through a part of the designated ACEC and also may have involved severe surface disturbance at one end where a bulldozer was used to clear vegetation. Mitigation for that area is pending.

The Heceta Sand Dunes ACEC continues to receive unauthorized off-road vehicle use that may be impacting the biological integrity of the ACEC. After review of the preliminary findings of the Resource Evaluation in fall of 1998, the access to the ACEC was posted as closed to motor vehicle use; however, the posted signs were placed to allow vehicle passage over a short (1/10th mile) sand track to allow access from Joshua Lane to the adjoining Forest Service Off-Highway Vehicle (OHV) "open" area. Motor vehicle use of this area has increased rapidly over the past year, since the Oregon Dunes National Recreation Area (ODNRA) to the south of Florence began charging fees to visitors, and enforcing noise restrictions on off-road vehicles using that area. The combined result of user fees and legal restrictions has displaced former ODNRA users, and caused them to move onto the Sutton Creek/Heceta ACEC area. The impact of this OHV user population on the nearby residential area has resulted in numerous complaints to BLM about noise and disorderly conduct by OHV users on the ACEC. Given the nature of many of the OHV users reportedly visiting the area, voluntary compliance with the motor vehicle closure is highly unlikely.

A suitable resolution of the management direction conflict between the Forest Service and BLM in this area is still being explored.

CULTURAL RESOURCES

Relationships with American Indian groups have broadened as a result of the NFP. The applicable tribal governments were invited to consult on all major projects (actions authorized under reciprocal right-of-way agreements and some small projects were excluded from consultation) between FY 95 and FY 98.

Cultural resource inventories were conducted prior to the initiation of projects throughout the District excepting those projects located in the Coast Range Physiographic Province. Cultural resource inventories in the Coast Range Physiographic Province follow guidelines established in the Coast Range regional survey strategy.

No archaeological excavations were conducted in the Eugene District during 1996, 1997, and 1998.

VISUAL RESOURCES

Mitigation measures intended to reduce visual contrasts of management actions include leaving 12-18 trees per acre in Visual Resource Management (VRM) Class III areas and performing an action specific visual contrast analysis for management actions within VRM Class II areas, such as the McKenzie River Special Recreation Management Area and the view sheds of proposed recreation sites. There are no VRM Class I areas designated on the Eugene District.

Most of the District's forested lands fall within VRM Class IV, which allows substantial visual contrasts to be created through management actions.

RURAL INTERFACE AREAS

When operating in Rural Interface Areas, the Eugene District has considered the interests of adjacent and nearby landowners in a number of ways including:

1. providing protective no-harvest buffers adjacent to private land to avoid potential damage to structure from windthrow in the residual stand after harvest;

2. leaving 12-18 trees per acre after harvest;

3. protecting private water rights for beneficial uses;

4. using dust abatement measures;

5. contacting all adjacent landowners prior to or during the project initiation process; and

6. providing field trips for adjacent landowners when concerns are identified.

Such activities occur on designated Rural Interface Areas as well as other lands adjacent to private lands where concerns have been voiced.

SOCIO-ECONOMIC

The Eugene District provides employment opportunities for local companies, contractors, and individuals in the implementation of the RMP and NFP. Timber sales, silvicultural treatment projects such as thinning, and planting trees, repair of storm damaged roads, the collection of ferns, mushrooms, and firewood, and the recreational use of public lands all provide work opportunities.

As has been mentioned previously, the Eugene District, in coordination with other federal, state and local governments, participates in the NFP Jobs-in-the-Woods / Watershed Restoration program. Eugene BLM awarded over 70 Jobs-in-the-Woods contracts valued at $4,168,000 during the period

1996 to 1998. These contracts were in 4 primary areas of emphasis listed below. (The actual amounts of appropriated funds spent on contract awards is listed in parentheses after the name of each area of emphasis).

Aquatic Conservation Strategy Projects ($2,256,000)

- Replacement of old culverts that impeded fish passage
- Instream structures such as the construction of a fish ladder on Upper Lake Creek
- Placement of logs and boulders within streams to improve fish habitat
- Management of vegetation to improve riparian habitat
- GPS location of culverts and road characteristics to assist with managing runoff and sedimentation of streams.

Upland Vegetation Management Projects ($712,000)

- Creation of snags for wildlife habitat
- Native species seed collection and grow out to produce a source of seed for restoration projects
- Density management to promote stand characteristics that enhance wildlife habitat.

Socio-Economic Projects - development of the Row River Trail ($1,201,000)

- Reconstruction of 4 train trestle bridges along the trail
- Row River Trail surface preparation and paving
- Development of a trail head at Mosby Creek for Row River Trail users.

Support for Ecosystem Work Force Demonstration Projects (included above)

- Eugene BLM's Jobs-in-the-Woods program funded several dozen task orders for work that would help trainees learn ecosystem worker skills. These skills would enable them to compete for the kinds of contracts BLM and other land management agencies expect to offer in the future.
- Eugene BLM funded about $300,000 in task orders for worker demo projects. The amounts are included in the totals shown for Aquatic Conservation Strategy and Upland vegetation management.
- Worker demo crews completed task orders for a variety of work including:
  - release of stream-side conifers from competing vegetation;
  - improvement of bald eagle habitat;
  - cabling in-stream log structures for fish habitat;
  - stand exams and stream surveys
  - noxious weed removal
  - timber sale layout and marking
  - oak savannah restoration
  - Long Tom ACEC restoration
  - progeny site measurements
  - salmon spawning surveys
  - wildlife tree enhancement
  - native seed collection
  - riparian restoration and maintenance

Project identification was based on opportunities listed in watershed analyses. Managers then selected the highest priority projects for contracting, based on restoration objectives and availability of staff to prepare and manage the contracts. Project planning had to start in many cases a full 2 years prior to award in order to ensure that all clearances, NEPA compliance, designs and contract preparation steps were completed.

Competition for Jobs-in-the-Woods contracts is limited to bidders located in Pacific Northwest counties affected by federal timber supply policies.

For several of these contracts, BLM made incentive payments to those employers who could demonstrate that they had hired dislocated forest workers.

Beginning in FY 1998, BLM shifted its Jobs-in-the-Woods program emphasis toward implementing the Governor's Coastal Salmon Initiative. These projects are intended to restore Oregon's coastal salmon populations to productive and sustainable levels.

Providing job opportunities to displaced forest workers continues to be an objective but is now secondary to ecosystem restoration objectives.

Table 21 - RMP - Summary of Socio-Economic Activities and Allocations

PROGRAM ELEMENT	Fiscal Year 1996 ($)	Fiscal Year 1997 ($)	Fiscal Year 1998 ($)
District budget	12,939,000	14,327,000	14,498,.000
Timber sale collections, O&C lands	16,492,640	16,372,986	8,865,547
Timber sale collections, CBWR lands	-0-	-0-	-0-
Timber sale collections, PD lands	636,072	-0-	-0-
Payments to Lane County (O&C/CWBR)	11,153,083	10,729,548	10,306,013
Payments to Lane County (PILT)	208,255	132,973	324,951
Value of forest development contracts	890,000	1,022,824	969,581
Value of timber sales, oral auctions (_#), and negotiated (_#) - TSIS	$12,627,786 (13) (8 negotiated) $157,624	$13,922,956 (14) (14 negotiated) $132,410	$11,065,280 (15) (3 negotiated) $12,467
Jobs-in-the -Woods funds in contracts	1,190,354	1,211,588	1,865,173
Timber Sale Pipeline Restoration Funds-Timber	-0-	-0-	334,970.00
Timber Sale Pipeline Restoration Funds - Rec.	-0-	-0-	395,810.00
Recreation Fee Demonstration Project receipts	-0-	975	23,316
Challenge cost share project contributions and value-in-kind or volunteer efforts	240,600.00	294,900.00	123,866.00
Value of land sales	-0-	950	-0-

Acronyms in table: O&C are Oregon and California Railroad lands; CWBR are Coos Bay Wagon Road lands; PD are Public Domain lands
PILT are Payments In Lieu of Taxes

ENVIRONMENTAL JUSTICE

To comply with Executive Order 12898 of February 11,1994: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations the Bureau of Land Management Eugene District will ensure that the public, including minority communities and low-income communities, have adequate access to public information relating to human health or environmental planning, regulations, and enforcement as required by law.

The District will provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected low-income and minority communities and improving the accessability of public meetings, crucial documents, and notices.

The District will analyze the environmental effects, including human health, economic, and social effects of Federal actions, including effects on minority populations, low-income populations, and Indian tribes, when such analysis is required by NEPA.

Mitigation measures identified as part of future EAs, Finding of No Significant Impact (FONSIs), EISs, or RODs, will, whenever feasible, address significant and adverse environmental effects of proposed federal actions on minority populations, low-income populations, and Indian tribes.

RECREATION

The Eugene District's Recreation Management Program includes an ongoing set of base operations as well as a number of activities that respond to changing land management needs and public demand. The base program includes operation and maintenance of 3 campgrounds at Whittaker Creek, Clay Creek, and Sharps Creek; a major group-use and day-use facility at Shotgun Creek Park; the 14-mile Row River Trail (Rails-to-Trails facility along Dorena Lake); boat landings on the McKenzie River at Silver Creek and Rennie; and a boat landing on the Siuslaw River at Whittaker Creek. The District also manages use of hundreds of dispersed use or undeveloped sites that provide opportunities for a wide variety of user defined recreational activities including motorcycle and horseback riding, hang gliding, shooting, fishing, water-play, camping, sightseeing, etc. The District also manages a National Recreational Trail at Whittaker Ridge, an interpretive trail at the Tyrrell Seed Orchard, a developed hiking trail at Clay Creek, and Watchable Wildlife sites at the West Eugene Wetlands, Whittaker Creek, Silver Creek, and Lake Creek Falls. Nonmotorized boating and warm water fishing opportunities are provided at Hult Reservoir.

In addition to the base program, the District provides commercial and competitive event permits for hunting guides, bicycle races and tours, off-road motorcycle races, horse drawn wagon rides, boating, equestrian events, and more.

In FY 1998 the District established all its revenue generating recreation service activities (campgrounds, Special Recreation Permits) as Pilot Fee Demonstration Projects under the authority of the 1995 appropriations bill as amended by the FY 1998 appropriations act. During FY 1998 (year one under the pilot fee demonstration program), public acceptance and cooperation resulted in a 30 percent increase in recreation revenues over the previous year.

Watchable Wildlife - The District refurbished the McKenzie River Watchable Wildlife platform in 1998 and installed a new interpretive sign describing the flood events that destroyed the original facility; constructed a wildlife photography blind in the West Eugene Wetlands; constructed a 400 foot wetlands interpretive boardwalk; and erected a bird perching structure. Biologists from the District addressed approximately 400 students (elementary school through University level) regarding wildlife and the roles of biologists in their management; made a presentation on Wildlife Tree Enhancement; and produced and published an updated Eugene Wetland Self-guided Tour booklet and a color brochure about the project.

Table 22 - Recreation Program Statistics

ITEM	FY 1995-1996	FY 1997	FY 1998
Public Land Visitors	1,603,530/2,078,000	2,140,340	2,204,500
Campsites Operated	61	61	61
Miles of Maintained Trail	23	23	23
Special Recreation permits	5/8	8	7
Recreation Permit Revenues	$27,428/$25,595	$24,159	$31,938

Volunteers - The contribution of volunteers to the District overall and to the recreation program specifically is substantial. Recreation program volunteers typically fall into one of 3 types - campground hosts, Row River Trail Adopt-a-Trail program participants, and project-specific volunteers (such as those who helped build segments of the Clay Creek Trail and McGowan Creek cleanup participants, etc.).

Table 23 - Volunteers

VOLUNTEER ITEMS	FY 1996	FY 1997	FY 1998
Number of Volunteers	219	221	266
Volunteer Hours	23,000	31,000	36,000
Value contributed	$276,000	$363,000	$422,000
Rec. Volunteers	113	91	110
Rec Volunteer Hours	6,200	5,700	7,100
Rec. Value contributed	$48,000	$51,000	$55,000
Special One-time Recreation Volunteer Projects	Tyrrell Forest Succession Trail ETRA OHV trails survey COPS cleanup, RRT	Tyrrell Forest Succession Trail Clay Creek Trail	Wetlands Interpretive Boardwalk OET horse trail evaluation

Fee Demonstration Sites - In FY 1998 the Eugene District designated all Special Recreation Management Areas (SRMAs) and dispersed use areas Fee Demonstration areas. This designation was accomplished with the cooperation and support of the Association of O&C Counties. The result is that all revenues generated through the District's recreation program are kept on the District and will be used for the recreation program and facility operations, enhancements, maintenance, and fee collection activities. The following table shows the results of the FY 1998 Fee Demonstration program operations.

Table 24 - Fee Demonstration Program

Fee Demonstration Area	FY 1997 Fees Collected	Fee- Demo Site Name
Eugene General - OR05	$ 419.00	**Special Recreation permits**
Shotgun SRMA - OR17	$10,230.00	**Group Shelters**
Siuslaw River SRMA - OR18	$ 9,997.00	**Whittaker Creek Campground**
Siuslaw River SRMA - OR18	$ 6,999.00	**Clay Creek Campground**
Siuslaw River SRMA - OR18	$ 1,011.00	**Special Recreation Permits**
Siuslaw River SRMA - OR18	$ 639.00	**Clay Sharps Creek Picnic Shelters**
Row River SRMA - OR19	$ 2,451.00	**Sharps Creek Campground**

OFF-HIGHWAY VEHICLE MANAGEMENT

In FY 1998 the District completed a job begun in FY 1997, posting more than 130 signs for motorized vehicle closures and limitations on the BLM road system. Along with ongoing law enforcement and compliance monitoring, this completes a significant part of the OHV designation action stated in the RMP. Trails inventories and condition surveys are underway in the Mohawk Recreation Management Plan area and were attempted for the Low Pass area. However, it had to be postponed due to off-road vehicle use restrictions imposed as part of fire closures affecting the Low Pass area.

Off-Highway vehicle damage mitigation was conducted at Horserock Ridge ACEC/RNA via fence and sign installation. The rock barriers placed at Hult Reservoir to discourage motorized vehicle damage to wetlands and camping areas along the west and south sides of the reservoir has proven effective in halting additional vehicle damage to these fragile sites.

In FY 1998 the BLM Open Off-Highway Vehicle designated area to the northeast of Florence, near Collard Lake, was posted to show visitors where public land boundaries were located and to discourage trespass on adjoining private lands. This was accomplished in cooperation with the Siuslaw National Forest, Mapleton Ranger District, following a series of public meetings that were held to gain public awareness and cooperation.

Unauthorized Off-Highway Vehicle use of the Heceta Dune area, which is designated "Closed" to off-highway vehicles, continued throughout FY 1998, and appears to have increased as some types of these vehicles have been effectively excluded from alternative areas such as the Oregon Dunes NRA due to operator unwillingness to pay fees or to comply with rules and regulations.

Off-Highway Vehicle Areas - There is no formally dedicated off-highway vehicle use area on the Eugene District. The Low-Pass area and the Shotgun-Mohawk areas are popular with Off-Highway Vehicle enthusiasts, and both areas receive heavy use and are crossed by a proliferation of informally established trails. Most of these trails follow disused timber haul roads and overgrown railroad grades, with short connector trails between the more stable roadbed segments. A few trails have literally been created newly across previously unroaded lands. Most of the trails cross or use private lands adjoining BLM lands.

The Mohawk RAMP is the first plan that looks at managing the off-highway vehicle trail network, and it is in the implementation phase following its approval in FY 1998.

Over FY 1997 and 1998, the restrictions and limitations specified for motor vehicle use in the RMP were posted across the District. With posting, it became possible to enforce the motor vehicle use restrictions.

DEVELOPED RECREATION SITES - The Eugene District operates 9 developed recreations sites, that include 61 family camping units at campgrounds at Whittaker Creek, Clay Creek, and Sharps Creek; 4 group picnic shelters at Clay Creek (2) and Shotgun Creek Park (2); picnic area at Shotgun Park; swimming beaches at Clay Creek and Shotgun Park; a multi-modal (hiking, bicycling, equestrian) surfaced trail at Dorena (Row River Trail); and paved boat landings at Whittaker Creek, Silver Creek, and Rennie. Interpretive signing, a paved boat ramp, and a toilet were installed at the Silver Creek Landing since it was destroyed by a flash flood in FY 1996. The Row River Trail became operational in FY 1997 with asphalt paving of its entire length and development of primitive trail heads. The parking lot at the Lower Lake Creek site at Lake Creek Falls was closed in FY 1998 to discourage visitation and related health and safety problems associated with recreational visits to the natural water slide. This effort proved unsuccessful, so plans were modified to develop the site to better reduce safety problems. A safety fence was upgraded at the Sharps Creek Day Use area in FY 1997.

DEVELOPED TRAILS - There are several trails on the District. The Old Growth Ridge National Recreation Trail runs from the Whitaker Creek Campground to a ridge bearing a number of big trees. Plans are being considered for building additional trail to create a return loops for visitors.

The ***Clay Creek Trail*** at Clay Creek Recreation Site was completed in FY 1996 and is undergoing improvement including construction of a pedestrian bridge.

At Shotgun Park there are nearly 5 miles of hiking trail.

The ***Row River Trail*** has received a number of improvements including trail side parking areas and access fencing in FY 1996, paving and installation of 3 toilets in FY 1997, rest areas at scenic points in FY 1998, and planning for major trail head construction in FY 1999.

A system of OHV trails in the Mohawk area that had been created by 4-wheel drive and off-road motorcycle enthusiasts over the past is being inventoried and planning has been initiated for rehabilitation of environmentally sensitive portions of several trails. A Transportation Management Plan for the area was initiated in FY 1998.

SPECIAL RECREATION MANAGEMENT AREAS - The Eugene District has 7 Special Recreation Management Areas (SRMAs), 6 of which were designated in the ROD. Eventually all of these areas will be covered by Recreation Area Management Plans (RAMPs).

EXTENSIVE RECREATION MANAGEMENT AREA - The remainder of the public lands within the Eugene District fall under the category of Extensive Recreation Management Area (ERMA). Generally, this is public land that is usually available for dispersed recreation use; however, there are no developed facilities, and no special management attention is directed toward such areas. An exception to this rule is the Mohawk area, which lies within the ERMA and, because of high public use and recreation management needs, receives more intensive recreation management than is typical of the ERMA. The following table shows the status of the recreation management areas.

Table 25 - Special Recreation Management Areas

SRMA NAME	SIZE In Acres (Approx)	STATUS OF RAMP
Siuslaw River SRMA	9,529	None/not planned
Lower Lake Creek	2,090	completed FY 1998
Upper Lake Creek	10,515	Initiated FY 1996
Row River	11,257	completed FY 1995
McKenzie River	2,178	on hold since FY 1995
Shotgun Park	277	not planned
Gilkey Creek	375	not planned
Eugene Extensive Recreation Management Area	281,000	Mohawk plan completed FY 1998. Remainder not planned.

BACK COUNTRY BYWAYS - In the RMP a total of 9 routes were identified as having potential for designation as Back Country Byways. To date none of these routes has been designated.

TIMBER RESOURCES

Introduction - Timber Sales in accordance with the Eugene RMP began in Fiscal Year 1995. During FY 1995 and FY 1996, the volume offered by the Eugene District was reduced below the Allowable Sale Quantity (ASQ) to reflect the restarting of the timber sale "pipeline" and to allow for some of the initial planning steps such as watershed analyses to be completed. Starting in FY 1997, the volume target was increased to the full ASQ level (36MMBF).

SALE METHODS - The Eugene timber sale program is composed of a number of different elements. The first and primary element is the advertised sale program. These sales are those that are advertised and competitively bid at auctions held typically on the 4th Thursday of the month. Most of the District timber volume is sold in this manner.

Second, timber is sold by negotiated sale to permit construction of roads across BLM lands in accordance with District Right-of-Way agreements and permits.

Third, some miscellaneous volume is sold to small operators where a competitive sale is not feasible due to size, location, or other factors. Included are small amounts of trees sold to facilitate safe logging operations on adjacent private lands, and trees endangering dwellings or roads.

Fourth, volume is sold as a modification to existing sales, such as corridor volume in commercial thinnings to permit logging operations to occur in a safe and economical manner.

Volume Accounting - Volume sold under the above 4 sale methods is divided into 2 types. The first type is what is known as ASQ (Allowable Sale Quantity) or chargeable volume and is the volume that has been computed to be the sustainable level, which those lands can produce under the standards and guides within the RMP.

The second type of volume is termed Non-ASQ volume. This volume is produced incidentally from lands reserved from planned harvest under the Northwest Forest Plan and the RMP. Examples of this type of volume might be sales designed to adjust stand densities in LSRs to accelerate development of late-Successional forest, or such projects as Riparian Reserve treatments.

HARVEST METHODS - A number of harvest methods are employed in the Eugene District. These consist of regeneration harvest, commercial thinning, density management, selective, clear cut, and salvage. Definitions of each of these types of harvest are shown in the Glossary.

The tables shown on the following pages are summarized at a District level only, and are based on offered sales. A more complete analysis of the volumes harvested and a comparison of these actual harvests with the computer projections of the decade's harvest will be completed as part of the 3rd year evaluation that is expected to be completed in the summer of 1999.

Table 26 - Volumes Offered FY 95-98

VOLUME - (MMBF)					
Land Use Allocation	**Offered FY95**	**Offered FY96**	**Offered FY97**	**Offered FY98**	**Total 95-98**
GFMA	15.6	23.9	26.6	23.6	89.7
Connectivity	2.2	5.3	10.9	8.6	27
AMA	0.1	0.1	0.1	0	0.3
Total ASQ Volume	17.9	29.3	37.6	32.2	117.0
Riparian Reserve Volume	0.2	0	0.1	3.8	4.1
Hardwood Volume	0.1	0	0.3	0.3	0.7
LSR Volume	0	0.7	0.3	2.7	3.7
Total Volume	18.2	30.0	38.3	39.0	125.5
FY Target Volume	19	30	36	36	121

Notes:
- FY 1995 volume from 5/22 till end of year only. Previous APS publications have tabulated the volume for FY 1995 on the entire fiscal year.
- One no-bid sale offered in FY 1996 and reoffered in FY 1997 is shown in FY 1997
- All volumes are rounded to the nearest .1 MMBF
- Does not include special forest product sales of saw timber

Table 27 - Regeneration Volume

Land use allocation	MMBF FY95	MMBF FY96	MMBF FY97	MMBF FY98	Total FY95 - FY98
GFMA	14.8	23.4	22.0	10.0	70.2
Conn	0.4	3.6	4.9	5.8	14.7
AMA	0.1	0.1	0	0	0.2
Riparian Reserve	0	0	0	.3	0.3
LSR	0	0.3	0.3	0.1	0.7

Note: Regeneration Volume includes Right-of-way volume. All LSR volume shown here is Right-of-Way volume. These volumes do not include hardwood volume. All volumes are rounded to nearest .1 MMBF

Table 28 - Thinning and Density Management Volume

Land Use Allocation	MMBF FY 95	MMBF FY 96	MMBF FY 97	MMBF FY 98	Total FY95 - FY98
GFMA	0.7	0.5	4.7	15.2	21.1
Conn	1.8	1.5	6.0	1.2	10.5
AMA	0	0	0	0	0
Riparian Reserves	.2	0	.1	3.4	3.7
LSR	0	.5	.2	2.7	3.4
TOTALS	2.7	2.5	11.0	22.5	38.7

Note: This table contains both commercial thinnings and density management thinnings in connectivity and reserved land use categories. Thinning volumes include selective harvest volume since the vast majority of such volume is generated as a result of yarding corridors needed to harvest thinning units. Small quantities of salvage are included here and not broken out separately. LSR thinning volume is a combination of modifications to timber sales that predate the RMP and sales that are designed to benefit the LSRs.

Table 29 - Regeneration Acres

Land Use Allocation	ACRES FY 95	ACRES FY 96	ACRES FY 97	ACRES FY 98	TOTAL ACRES FY95 - FY98
GFMA	400	703	737	285	2125
Conn	12	110	150	218	490
AMA	1	0	1	0	2
Riparian Reserve	0	0	0	10	10
LSR	1	7	10	6	24
TOTALS	414	820	898	519	2651

Note: Acres shown include right-of-way acres. Acres shown for LSRs are generally right-of-way contracts under existing Right-of-Way agreements. Acres shown are generally original project acres. Actions such as modifications to sales for logging corridors are not tabulated as additional acres unless they lie outside the project boundary.

Table 30 - Thinning And Density Management Acres

Land use allocation	ACRES FY 95	ACRES FY 96	ACRES FY 97	ACRES FY 98	TOTAL ACRES FY95 - Y98
GFMA	88	21	245	1011	1365
Conn	199	146	285	75	705
AMA	0	0	0	0	0
Riparian Reserves	0	0	4	214	218
LSR	0	58	0	188	246
Totals	287	225	534	1488	2534

Conclusions - During Fiscal Year 1995 and 1996, harvest was concentrated in the Matrix lands. During Fiscal Years 1997 and 1998, the timber sale program broadened out to a more balanced approach, both in the type of harvests used and the land use allocations where these harvests were placed. The completion of LSR assessments permitted density management projects to begin in the LSRs to accelerate development of late-successional forest characteristics and similar density management treatments to begin in Riparian Reserves to promote the attainment of Aquatic Conservation Strategy Objectives.

It is important to add, during the early stages of plan implementation, regeneration harvest sales have been concentrated in younger stands 50 to 60 years of age. These younger stands were a result of timber sales initiated in the 1930's and 1940's. Many of these stands have few if any snags, and or class 1 and 2 Coarse Woody Debris. The result has been to leave additional trees above the required green tree retention tree levels, in many areas, as a source of future CWD and snags.

A formal evaluation of the RMP and the forestry program is currently beginning. This 3rd year evaluation will compare the actual sale volumes over the 4 fiscal years to those projected as part of the calculation of the ASQ. This evaluation is expected to be completed in the summer of 1999.

Table 31 - FY 1998 Timber Sales

SALE NAME	RESOURCE AREA	VOLUME (MBF)	VOLUME (CCF)	MONTH SOLD
Fall Creek	McKenzie	2388	3808	November
Par 5 R/W Decks	McKenzie	192	317	November
Armitage	McKenzie	3659	6762	January
Tyrrell	South Valley	1841	3371	March
Pitcher Clear	South Valley	2647	4675	March
Log Creek	McKenzie	1909	3411	March
Tri-Lake Thin	Coiast Range	45	145	May
Ten High	Coast Range	8580	15890	May
Go Cart	McKenzie	1886	3432	June
Gold Wind	McKenzie	8529	14151	August
Torched Mill	South Valley	3278	5358	August
Second Wind	Coast Range	542	918	September
Alma Over	Coast Range	632	1054	September
Link n' Log	South Valley	2195	4167	September
Perkins Creek	South Valley	936	1656	September
Totals		**39,259 (39.3MBF)**	**69115 (6.9MCF)**	

Note: -Only advertised sales are shown. No modifications, negotiated sales or other misc. volume is included.
-Volume shown is total sale volume. Some sales include other District volume, which is not shown in other tables.

Silviculture - A summary of various silviculture practices (forest development and timber stand improvement practices) that were accomplished in fiscal years 1996, 1997, and 1998 are displayed in Table 32. This work was accomplished through 71 contracts valued at approximately $2,471,200.

Table 32 - Silviculture Practices

SILVICULTURE PRACTICES	**Average Annual Acres (1996-1998)**		
	Total all LUAs	**Matrix only w/o Riparian Reserves**	**Annual Commitment from RMP**
Site Preparation - prescribed fire 1	85	47	1,070*
Site Preparation - other 1	537	266	350
Vegetation control	2,259	505	340
Animal damage control	766	449	600
Precommercial thinning	4,397	930	590
Brushfield/hardwood conversion	0	0	50**
Planting/regular stock	517	335	0
Planting/genetically selected stock	266	172	680***
Fertilization	0	0	1,670
Pruning	51	28	630**

1 - Some of these acres were timber sales completed prior to the NFP & RMP/ROD.

*The estimated number of yearly acres of site preparation using prescribed fire is **80 acres/year**. The additional yearly acres in Table 1 of prescribed fire acres are for habitat maintenance, restoration, and hazard reduction.

**Both hardwood conversion and pruning acres are estimates that are probably above current needs.

***Tree planting with entirely genetic stock may not be possible due to nursery under-runs and/or not having specific seedling needs for an area. A truer estimate would be that about 90% of our annual tree planting on matrix lands would be with genetic stock.

The next 3 tables show the yearly silvicultural accomplishments on the Eugene District for FY 1996, 1997, and 1998.

Table 33 - 1996 Silvicultural Accomplishments

TREATMENT	**TYPE**	**ACRES**		**Est. RR Acres in:**	
		Matrix	**LSR**	**Matrix**	**LSR**
Planting	initial	468*	0	259	0
	replant	0	0	0	0
Site Preparation	burning	22	18	12**	5
	manual	104	2	56**	0
	mechanical	402	170	208**	120
Vegetation Maintenance	manual	347	808	200	407
Seedling Protection	tubing	10	0	3	0
	shading	15	2	0	0
	netting	250	145	135	80
Vegetation Release	manual	450	1,027	180	565
Precommercial Thinning	manual	3,018	1,476	1,600	895
Pruning	manual	0	0	0	0

* **187 acres** (40%) of the 468 acres were planted with genetically selected seedlings.

** **Assumptions used:**
- Riparian Reserves average 44% of the landscape in the McKenzie Resource Area.
- Riparian Reserves average 55% of the landscape in the South Valley Resource Area.
- Riparian Reserves average 65% of the landscape in the Coast Range Area.

Approximately 22 projects were completed in FY 1996 totaling more than $875,900 in contracts.

Table 34 - 1997 Silvicultural Accomplishments

TREATMENT	TYPE	ACRES		Est. RR Acres in:	
		Matrix	LSR	Matrix	LSR
Planting	initial	476*	21	212	5
	replant	235	6	12	2
Site Preparation	burning	120	96	48**	0
	manual	30	0	14**	0
	mechanical	295	0	160**	0
Vegetation Maintenance	manual	751	508	349	220
Seedling Protection	tubing	83	5	41	2
	netting	627	18	282	8
Vegetation Release	manual	417	1,547	188	688
Precommercial Thinning	manual	2526	1,242	1,450	575
Pruning	manual	0	0	0	0

* **201 acres** (42%) of the 476 acres were planted with genetically selected seedlings.

****Assumptions used**:
- Riparian Reserves average 44% of the landscape in the McKenzie Resource Area.
- Riparian Reserves average 55% of the landscape in the South Valley Resource Area.
- Riparian Reserves average 65% of the landscape in the Coast Resource Area.

Approximately 25 projects were completed in FY 1997 totaling more than $805,300 in contracts.

Table 35 - 1998 Silvicultural Accomplishments

TREATMENT	TYPE	ACRES		Est. RR Acres in:	
		Matrix	LSR	Matrix	LSR
Planting	initial	904*	167	90	16
	replant	10	61	0	5
Site Preparation	burning	0	0	0	0
	manual	113	0	0	0
	mechanical	496	0	25**	0
Vegetation Maintenance	manual	594	0	280	0
	netting	868	167	87	15
Vegetation Release	manual	240	116	105	70
Precommercial Thinning	manual	1212	3,927	600	1,989
Pruning	manual	153	0	70	0

* **245 acres** (27%) of the 904 acres were planted with genetically selected seedlings.

****Assumptions used:**
- Riparian Reserves average 44% of the landscape in the McKenzie Resource Area.
- Riparian Reserves average 55% of the landscape in the South Valley Resource Area.
- Riparian Reserves average 65% of the landscape in the Coast Resource Area.

Approximately 24 projects were completed in FY 1998 totaling more than $790,000 in contracts.

SPECIAL FOREST PRODUCTS

The Eugene District sold a wide variety of products under the SFP (Special Forest Products) program in FY 1996, 1997, and 1998. These included mushrooms, mosses, floral greenery, plant transplants, boughs, wood products such as poles and fence posts, and plants used for herbal or medicinal products. Interest in SFP has increased in the last few years ever since the implementation of the Northwest Forest Plan.

This is seen as an opportunity to partially offset some of the economic effects of reduced timber harvest under the NFP.

The following tables reflect the SFP sales for FY 1996, 1997, and 1998 on the Eugene District. These tables provide an opportunity to note fluctuations from year to year and observe harvest trends.

Table 36 - RMP - Summary of Special Forest/Natural Product Actions and Accomplishments

RMP Authorized product sales	Unit of measure	Fiscal Year 1996 * Units/contracts/value	Fiscal Year 1997 Units/contracts/value	Fiscal Year 1998 Units/contracts/value	3-year total Units/contracts/value
Boughs, coniferous	Pounds	1,050/3/$20.60	400/3/$4.75	700/3/$16.00	**2150/9/$41.35**
Burls and miscellaneous	Pounds	0	20/1/$3.00	1,020/2/$103	**1040/3/$106.00**
Christmas trees	Number	109/109/$545.00	65/65/$325.00	127/127/$635.00	**301/301/$1,505.00**
Edibles and medicinals	Pounds	1,835/8/$90.75	540/1/$26.20	5,900/10/$291	**8,275/19/$407.95**
Feed & Forage	Tons	0	0	0	**0**
Floral & greenery	Pounds	27,955/84/$1,952.85	45,560/170/$3,160	142,000/329/$10,348	**215,515/583/$15,469.85**
Moss/bryophytes	Pounds	16,978/31/$530.45	10,326/25/$341.70	22,829/56/$693	**50,133/112/$1,565.15**
Mushrooms/fungi	Pounds	5,240/68/$1,303.75	9,900/117/$3,677.00	14,955/209./$3,734.75	**30,095/394/$8,715.50**
Ornamentals	Bushels	0	0	0	**0**
Seed and seed cones	Number	0.3/1/$18.75	10/1/$5.00	0	**10.3/2/$23.75**
Transplants	Number	220/7/$42.00	590/21/$118.60	305/14/$46.80	**1,115/42/$207.40**
Wood products/ firewood **	Cubic feet	88,893/135/$2,367.00	110,887.8/150/$3,307.59	61,205/109/$2,112.60	**260,985.8/394/$7,787.19**

* **Contract numbers** represent individual sale (or free use) actions. **Value** is in dollars per year received.

** To avoid double counting, line does not include products converted into and sold as either board or cubic feet and reported elsewhere.

Table 37 - Cumulative Summary Report of Negotiated Cash Sales - Eugene District - FY 1998

PRODUCT	QUANTITY	UNIT OF MEASURE	NUMBER OF CONTRACTS	VALUE RECEIVED $	MAINTENANCE FEES ($) COLLECTED
Boughs - Coniferous	700	Pounds	3	16.00	1.50
Burls & Miscellaneous	1,020	Pounds	2	103.00	10.30
Christmas Trees	127	Number	127	635.00	0.00
Edibles & Medicinals	5,900	Pounds	10	291.00	31.00
Feed & Forage	0	Tons	0	0.00	0.00
Floral & Greenery	142,000	Pounds	329	10,347.80	999.60
Mosses - Bryophytes	22,829	Pounds	56	693.25	72.00
Mushrooms - Fungi	14,955	Pounds	209	3,734.75	374.50
Ornamentals	0	Number	0	0.00	0.00
Seed & Seed Cones	0	Bushels	0	0.00	0.00
Transplants	305	Number	14	46.80	2.40
Wood Products - SFP	61,205.2	Cubic Feet	109	2,112.60	185.00
Wood Products - Saw timber	2,575.4	Cubic Feet	5	5,248.70	37.54
Current Totals - SFP ONLY			**859**	**$17,980.20**	**$1,676.30**
Current Totals -All Products			**864**	**$23,198.90**	**$1,713.84**

There has been a notable increase in the sales of the floral greens and mushrooms in the last 3 years. With favorable weather conditions and demand for product, the mushroom harvest is noted to have more than doubled. Due to increased numbers of harvesters requesting permits, the sale of floral greenery (primarily salal) has increased more than 5 times over this same period. Even though demand has not wavered, the sale of firewood has declined due to the decrease in availability from requirements in the NFP to leave down wood material within harvested areas.

To help ensure sustainability of SFP, the District has not allowed harvesting within Riparian Reserves, and has not allowed harvest of mosses in LSRs pending the completion of a Districtwide EA (Environmental Assessment) for the Special Forest Products program. The research project being implemented by OSU is studying recovery rates for mosses after harvest. In addition, harvest of certain plants is not permitted where there are questions of sustainability or sensitivity to harvesting. Finally, limits on quantity and field evaluations are used to estimate localized effects of harvesting.

NOXIOUS WEEDS

The Noxious Weed Program on the Eugene District has a prevention plan based on the introduction of new noxious weeds and restricts and/or decreases noxious weed infestation on BLM administered land using an integrated pest management approach. The Eugene District has completed surveys on BLM administered land and has implemented a prevention plan, based on monitoring, and a integrated pest management approach (chemical, mechanical, manual, and biological). All methods used are in accordance with BLM's 1985 Northwest Area Noxious Weed Control Program Environmental Impact Statement, 1987 Supplement, and respective Records of Decision. The District works with The Oregon Department of Agriculture in reporting new infestations and obtaining new information on weeds and new biocontrols.

Table 38 - Integrated Noxious Weed Management

Treatment	Species	FY96 Acres	FY97 Acres	FY98 Acres
Manual	Scotch broom	20	8	128
	Meadow knapweed	18	18	11
Biological	Scotch broom	0	0	60
	Meadow knapweed	0	0	5
Chemical	Scotch broom	0	0	0
	Meadow knapweed	0	0	0

FIRE AND FUELS MANAGEMENT

FY 1996-1998 Site preparation, prescribed fire: 688 treated acres.
FY 1998 Site preparation, prescribed fire: 536 treated acres

Table 39 - Fire and Fuels Management

Total Treatment Acres FY 1996-1998				
Treatment Type	**FY 1996**	**FY 1997**	**FY 1998**	**3-year Total**
No treatment	0	16*	777**	793
Mechanical	0	152	454	606
Manual	0	0	82	82
Broadcast	0	0	0	0

* All commercial thinning
** Includes 535 acres of commercial thinning

FY 1996-1998 on District fires: 15 fires for a total of 82.3 acres
FY 1998 on District fires: 6 fires for a total of 10.1 acres

Table 40 - Fire Management

Eugene District Fires 1996-1998				
	1996	**1997**	**1998**	**Total**
Lightning	2	0	2	4
Human caused	4	3	4	11

Eugene District personnel and resources were dispatched to a total of 242 fires during the 1996-1998 fire seasons. Of this total 84 were dispatched during the 1998 fire season.

ACCESS AND RIGHTS-OF-WAY

New legal access has been acquired through new easements, new reciprocal right-of-way agreements, and through amendment of existing agreements. Activity by fiscal year is displayed in the table below. Easements were acquired to provide road access to a proposed timber sale, to provide alternate road access to the Walton Road Maintenance Site, and to construct a fence to limit off-road vehicle access to the Horse Rock ACEC. One easement never constructed or used by BLM was released to remove an encumbrance on private property.

Two new reciprocal Right-of-Way agreements were completed in FY97: a small one to provide access to a proposed timber sale in the McKenzie Resource Area, and another to replace an old existing agreement that was difficult to administer because of its lack of detailed terms and conditions.

Table 41 - Reciprocal Right-of-Way Agreements

	FY96	FY97	FY98
Easements			
New Easements Acquired	1	1	1
Releases & Terminations	1	0	0
Reciprocal Agreements			
New Agreements Completed	0	2	0
Amendments	5	6	2
Assignments	11	0	6
Releases & Terminations	1	4	0

Rights-of-way - Applications for rights-of-way across BLM administered lands have been received and processed under the RMP/ROD at a relatively low but consistent rate. New authorizations were predominantly for use of existing roads for log hauling and for legal ingress and egress to private land, but also include domestic water lines, existing aerial electric distribution lines, and buried telephone and electric distribution lines. There have been no requests for new communication sites or for hydroelectric or surface water developments. Case activity by fiscal year is displayed in the following table:

Table 42 - Rights-of-Way Agreements and O&C Road Permits

	FY96	FY97	FY98
Rights-of-Way			
New Cases Processed	3	5	5
Amendments	1	4	1
Assignments	2	2	2
Relinquishments & Terminations	3	5	1
O&C Road Permits			
Permits Processed or Extended	18	14	8
Amendments	0	0	0
Assignments	2	0	2
Relinquishments & Terminations	13	30	12

Transportation/Roads - The Western Oregon Transportation Management Plan was completed in 1996. One of the stated objectives of the plan is to comply with ACS objectives. As part of the watershed analysis process road inventories and identified drainage features, which may pose a risk to aquatic or other resource values, are discussed and documented.

The activities that are identified in watershed analyses as a recommendation include:

- surfacing dirt roads
- replacing deteriorated culverts
- replacing log fill culverts
- replacing undersized culverts in perennial streams to meet 100 year flood event.

Other efforts were made to reduce overall road miles by closure or elimination of roads (decommission, or full decommissioning). The terms to describe the two types of decommissioned roads are:

Decommissioned - Road segments closed to vehicles on a long-term basis, but may be used again in the future. The road is left in an "erosion-resistant" condition by establishing cross drains and removing fills in stream channels and potentially unstable fill area. The road is closed with a tank trap or equivalent.

Full Decommission - Roads determined through an interdisplinary process to have no future need would be subsoiled, seeded, mulched and planted to reestablish vegetation. Natural hydrologic flow would be restored.

Table 43 - Miles Of Road Reduced

	FY 1996	**FY 1997**	**FY 1998**
Decommissioned (miles)	-0-	3.59	4.46
Fully Decommissioned (miles)	4.02	7.05	1.83

To protect the remaining high quality habitats, existing system and nonsystem roads within Key watersheds should be reduced through decommissioning or a reduction in road mileage. The intent is to have no net increase in the amount of roads in Key Watersheds. The following table list the Key Watersheds in Eugene District and road mileage in them before the NFP and in 1998.

Table 44 - Road Status In Key Watersheds

KEY WATERSHED	**FY 94 MILES OF ROAD**	**FY 98 MILES OF ROAD**	**NET GAIN/DECREASE**
Bear Marten	**81.3**	**82.3**	**+1.0**
Upper Smith River	7.4	7.4	-0-
Steamboat Creek	**0.5**	**0.5**	**-0-**
North Fork Smith River	0.6	0.6	-0-
TOTAL MILES	**89.8**	**90.8**	**+1.0**

Note: The 1.0 mile increase in road mileage in this key watershed was the result of a pre-Forest Plan timber sale that was sold and unawarded in November 1991. This sale, Martin Power, was later awarded unmodified from its original design in October 1995 under the authority of the Rescissions Act. Road construction and timber harvest occured in 1996. Eugene District does not have any land in the Upper Lobster Creek Watershed.

ENERGY AND MINERALS

There were no plans of operations submitted for FY 96, 97, or 98 and no mining notices received. Mining claim compliance inspections numbered 10 for FY 96, 30 for FY 97, and 15 for FY 98.

LAND TENURE ADJUSTMENTS

One small land sale and 4 exchange transactions were completed during FY96-98. See the Table 45 on the next page for statistics on the land tenure changes and land use authorization/realty trespass case activities during the period. The table does not include data for lands purchased with Land and Water Conservation Fund money for the West Eugene Wetlands Project (WEW) because the WEW is managed under the West Eugene Wetlands Plan rather than the Eugene RMP. The land sale transferred 0.37 acre to resolve a long-standing, inadvertent occupancy trespass in the McKenzie Resource Area. One other parcel listed on Table 16 (Land Tenure Zone 3 Lands) of the RMP/ROD was sold in June 1995 to also resolve an inadvertent occupancy trespass (0.28 acre).

The exchange transactions completed during the first 3 years of the Eugene RMP include a small exchange in Western Lane County with International Paper Company (IP) and 3 additional conveyances where additional land was owed to BLM to equalize values under prior exchanges. The IP exchange enabled BLM to acquire land adjacent to the Clay Creek and Whittaker Creek Recreation Sites, where BLM had inadvertently constructed facilities on IP land, and to acquire important riparian lands along the Siuslaw River.

A boundary realignment with the Salem District was completed in FY97 as described on page 95 of the RMP/ROD. The boundary change transferred the Eugene portion of the Lobster Creek key watershed and 2 additional tracts to the Salem District, totaling approximately 1391 acres.

There were no title transfers under the ***Color-of-Title Act*** or the ***Recreation and Public Purposes Act***. No land transfers took place to or from other public agencies (see Table 17 of the RMP/ROD). Recommended transfers between BLM and U.S.F.S. would require legislation from Congress.

An amendment to the Eugene RMP was completed in FY98 to change the Land Tenure Zone designation of 4 parcels of land. One 114-acre tract was changed from Zone 1 (retention) to Zone 2 to facilitate completion of an exchange with John Hancock Mutual Life Insurance Co., while an additional 21 acres were changed from Zone 2 to Zone 3 to allow sale of 2 small occupancy trespass sites and sale of the Low Pass Transfer Site to Lane County. Additional language was added to the RMP to allow the disposal of lands without a plan amendment where survey hiatuses and unintentional encroachments on public land are discovered in the future, when legal disposal criteria are met, and where sale is otherwise consistent with the RMP/ROD.

A small number of **Temporary Use Permits (TUP)** were issued during the period to authorize rock stockpiling in existing stockpile sites, commercial filming, and beehive sites. Several trespass cases were processed in connection with unauthorized dumping on public land and unauthorized commercial road use.

Table 45 - Land Tenure, Temporary Use Permits and Trespass Cases

Land Sales	**FY 96**	**FY 97**	**FY 98**
Sale Transactions Completed	0	1	0
Acres Sold	0	0.37	0
Land Purchases/Donations			
Transactions Completed	0	0	0
Acres Acquired	0	0	0
Land Exchanges			
Exchange Transactions Completed	2	2	0
Acres Transferred	200	0	0
Acres Acquired	174	359	0
Temporary Use Permits			
Cases Processed	5	3	2
Leases			
Cases Processed	0	0	0
Realty Trespass			
Cases Processed	4	5	2

Table 46 - Land Exchange Land Status and LUA Changes

	O&C In	O&C Out	PD In	PD Out	GFMA In	GFMA Out	LSR In	LSR Out	AMA In	AMA Out
Intl Paper*	160	200	0	0	160	120	0	80	0	0
Toftemark	14	0	0	0	14	0	0	0	0	0
Ramsey	310	0	0	0	310	0	0	0	0	0
Hancock	49	0	0	0	0	0	0	0	49	0

* Exchange completed 9/28/95 in FY95 under Notice of Decision signed 10/94 prior to completion of RMP/ROD.

Withdrawals

Table 18 and Appendix L of the RMP/ROD contain 34 recommendations for making new withdrawals from the public land laws and the mining laws, for revoking existing withdrawals, and for modifying existing withdrawals. In the past 3 years, 2 of these recommended actions have been completed - the new Pacific Coastline - Highway 101 withdrawal, and revocation of Power Site Classification 287. New protective withdrawals for the Row River Trail, the West Eugene Wetlands, and the Long Tom ACEC are in process and are expected to be completed in FY99. Implementation of the other recommendations has been delayed due to realty work load priorities, but is expected to be accomplished gradually over a number of years as work loads permit.

HAZARDOUS MATERIALS

1996

There were 5 emergency response incidents where the emergency response contractor was utilized to investigate/remove abandoned hazardous wastes on public lands with a cost of approximately $5,200. Approximately 20 incidents of illegal dumping that were solid waste were also investigated. A Compliance Assessment - Safety, Health, and the Environment (CASHE) was conducted in 1995 and the bulk of the 77 findings were corrected. Development of District Hazardous Materials Contingency Plans was begun. Six preacquisition environmental site assessments were completed to support the District land acquisition program.

1997

There were 5 emergency response incidents where the emergency response contractor was utilized to investigate/remove abandoned hazardous wastes on public lands with a cost of approximately $33,000. There was one conviction and sentencing related to one incident of illegal dumping of abandoned hazardous wastes. Approximately 25 incidents of illegal dumping that were solid waste were also investigated. A CASHE was conducted in 1995 and the remainder of the findings were corrected except for the ones involving the above ground fuel storage tanks at the Whites Creek Road Maintenance Shop. Development of District Hazardous Materials Contingency Plans continued with most being in draft form. Nine preacquisition environmental site assessments were completed to support the District land acquisition program.

1998

There were 10 emergency response incidents where the emergency response contractor was utilized to investigate/remove abandoned hazardous wastes on public lands with a cost of approximately $17,000. There were 2 convictions related to one incident of illegal dumping of abandoned hazardous wastes in 1997. Approximately 30 incidents of illegal dumping that were solid waste were also investigated. Development of District Hazardous Materials Contingency Plans continued with all being in draft form. Seven preacquisition environmental site assessments were completed to support the District land acquisition program.

COORDINATION, CONSULTATION

Consultation and coordination with all levels of government have been ongoing and are a standard practice in the Eugene District. On the federal level, the District consults with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service on matters relating to federally listed threatened or endangered species. The District coordinates its activities with the U.S. Forest Service on matters pertaining to the Central Cascades AMA and also through development of interagency watershed analyses. State level consultation and coordination occurs with the State Historic Preservation Office for Section 106 compliance, and with Oregon Department of Forestry, Oregon Department of Fish and Wildlife, and Oregon Division of State Lands (primarily for Coastal Zone consistency determinations). On a local level the District consults with, Lane County, and Lane Council of Governments, and ensures government to government coordination takes place between tribal governments and the District.

RESEARCH AND EDUCATION

The Cooperative Forest Ecosystem Research project (CFER) is a program initiated in June 1995. Cooperators in this program are the Bureau of Land Management, Forest and Rangeland Ecosystem Science Center (FRESC) of the United States Geological Survey, the College of Forestry at Oregon State University (OSU), and the OSU College of Agricultural Sciences. The intent of this program is to facilitate ecosystem management in the Pacific Northwest with an emphasis on meeting BLM priority research information needs in western Oregon. CFER research will address short-term information needs within the context of conducting integrative, long-term ecological research.

Response to a National assessment of BLM research information needs in 1996 established the foundation and initial general direction of the CFER program. In the assessment BLM identified the highest priority need as research information to support the implementation of the Northwest Forest Plan with 3 specific subcategories of interest: (1) determining how biodiversity of young forest stands compares/contrasts in managed and natural conditions, (2) ecology and management of riparian zones, (3) assessing habitat needs and protection for survey and manage and other special interest species.

A research problem analysis completed in 1997 helped focus and direct this research program and started the initiation of new projects as well as, where possible, the integration of existing research into the CFER program. The following research project is currently underway on the Eugene District:

DENSITY MANAGEMENT STUDY - The BLM, Oregon State University, the U.S. Geological Survey's Biological Resources Division, and the U.S. Forest Service Pacific Northwest Research Station have developed the Density Management Study to research various aspects of the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl.* Objectives of the Density Management Study include determining how to manage relatively young (30 to 70 yrs.) forest stands to accelerate the development of late-Successional forest structural characteristics; research on the response of lichens, bryophytes, and amphibians to density management treatments; and monitoring the effects of density management in riparian areas on micro-climate and riparian-associated species.

The Density Management Study is currently being implemented on 3 sites in the Eugene District: "Bottomline," "Perkins Creek,"and "Ten High."

> The **Bottomline** project area is located in Section 1, Township 21 South, Range 5 West, in the South Valley Resource Area of the Eugene District (EA-OR-090-94-28). The project area is in the Connectivity/Diversity Block portion of the Matrix land use allocation. The timber to implement the density management thinning treatments at Bottomline was sold, and harvesting has been completed. Research and monitoring are on-going at this time.
>
> The **Perkins Creek** project area is located in Section 27, Township 21 South, Range 2 West,

in the South Valley Resource Area (EA-OR090-98-9). The project area is in the Connectivity/Diversity Block portion of the Matrix land use allocation. The Perkins Creek project area is one of 7 "rethinning" sites in the Density Management Study. These 7 sites were selected from among managed stands that were commercially thinned, have abundant advanced conifer regeneration (i.e., young trees growing in the understory), and have reasonable road access. The timber to implement the density management thinning treatments at Perkins Creek has been sold, but harvesting has not yet occurred.

The **Ten High** project area is located in Sections 10 and 15, Township 15 South, Range 7 West, in the Coast Range Resource Area (EA-090-98-11). The project area is in the General Forest Management Area of the Matrix land use allocation. The timber to implement the density management thinning treatments at Ten High has been sold, but harvesting has not yet been completed.

More detailed descriptions of the Density Management Study are provided in the research study plans that are contained in the project analysis files for the Bottomline, Perkins Creek, and Ten High timber sales.

Other Research: Adaptive management monitoring of Spotted Owls in young forest stands, influence of landscape characteristics on abundance and habitat use of bats, and long-term fertilizer studies on growth and development of Douglas-fir.

EDUCATION - The Eugene District encourages the use of the Forest Succession Trail at the Travis Tyrrell Seed Orchard as a outstanding opportunity for environmental education. The interpretive trail allows visitors to learn about forest succession, experience forest dynamics, become familiar with tree and plant species native to the area, and to understand natural cycles and how they benefit all species.

The Eugene District is an active partner with Oregon Trout and Oregon Department of Fish and Wildlife in the award-winning Salmon Watch program. The program helps facilitate and coordinate community service projects, teacher training, curriculum and on-site field trips for middle and high school students. Over 500 local students participate annually in the program, which includes visits to BLM sites at Whittaker Creek and/or Fish Creek Watchable Wildlife Viewing areas.

The District's Environmental Education program utilizes numerous employees to participate in 10-15 activities each year. The activities include: hosting field trips for schools or Scout Troops, providing presentations at service clubs or in the classroom, and facilitating the popular Kidstart Project, which places student art in the District office. Approximately 500-1000 students and 100-200 adults participate in these types of activities each year.

INFORMATION RESOURCE MANAGEMENT

GIS Section in the APS - The BLM in Western Oregon made a substantial investment in the building of a Geographic Information Systems (GIS) as it developed the Resource Management Plans (RMPs). This information system has allowed the BLM to organize and standardize basic resource data across the Western Oregon Districts. The GIS has now become a day-to-day tool in resource management that allows BLM to display and analyze complex resource issues in a fast and efficient manner. In support of the 3rd Year Evaluation, GIS efforts have been focused on analysis of the data to compare the RMP assumptions with the initial years of plan implementation. BLM is now actively updating and enhancing resource data as conditions change and additional field information is gathered. The GIS plays a fundamental role in ecosystem management that allows us to track constantly changing conditions, analyze complex resource relationships, and take an organized approach for managing data.

CADASTRAL SURVEY

The Cadastral Survey section accomplished the following from October 1996 thru September 1998:

1. The Cadastral Survey Crew completed 14 projects with a total of 79 miles of resurvey (FY96 - 20 miles; FY97 - 30 miles; FY98 - 29 miles). 97 monuments were established and a total of 32 miles of federal boundaries were marked. These surveys were completed for the purpose of future timber sales and land disposal for Lands and Realty.

2. Geographic Positioning Systems (GPS) technology was provided to the following work groups: Botany and biology for mapping wildlife and botany sites, recreation for mapping hiking trails, GIS for the photo-registration project, and assisting the road's inventory and sediment project. Six GPS training sessions were conducted by a Land Surveyor for approximately 50 District employees.

3. The Geographic Coordinate Data Base (GCDB) project completed 12 townships. Each township was abstracted for survey data and adjusted for final coordinates to serve as the Public Land Survey layer for GIS.

Other accomplishments by Cadastral Survey included resolving Water Rights issues, providing technical support for the Land Line Inventory for GIS, and administering the land survey contract for the survey of land acquisitions for the West Eugene Wetlands' program. Also, approximately 75 inquiries of surveying information from private land surveyors and local landowners were answered.

LAW ENFORCEMENT

The Eugene District has 2 full-time Rangers, the District Ranger and the Coast Range Resource Area Ranger. In addition the Eugene District has a halftime contract for a Deputy Sheriff to patrol the public lands. The District works cooperatively with other agencies such as the Oregon State Police, Douglas and Linn County Sheriff's Offices, U.S. Forest Service, Eugene Police Department, FBI, and INET (Interagency Narcotics Enforcement Team) who provide law enforcement services to BLM. The District also receives investigative support from BLM Special Agents. One Special Agent is currently stationed in Eugene at a detached work location.

Law enforcement efforts on the District focus on patrol, investigating criminal activities, and physical security to provide for employee and public safety and to protect natural resources and property. Incidents and violations have involved timber theft, poaching, marijuana cultivation, methamphetamine labs and dumping, recreation, occupancy trespass, abandoned vehicles, timber protests, sanitation, special forest products, fisheries, and other areas.

Law enforcement efforts have included educating the public, issuing verbal and written citations, and making arrests when appropriate. Law enforcement works closely and coordinates their activities with BLM employees in other disciplines. Law enforcement handled about 192 incidents in FY96, 247 incidents in FY97, and 290 incidents to date in FY1998.

NEPA DOCUMENTATION & PLANNING

Approximately 107 Environmental Assessments were either begun, ongoing or completed during fiscal years 1996 thru 1998. Environmental Assessments vary in complexity, detail, and length depending on the project involved. Some of Eugene District timber sale Environmental Assessment decision records have been protested and appealed. Protest and appeal issues have challenged compliance with the RMP ROD, compliance with NEPA, analyses, assumptions and conclusions. The table below shows a cumulative number of EAs per category for fiscal years 1996 thru 1998:

Table 47 - EAs Per Category for FY 1996 thru 1998

Timber Sales	42
Recreation	6
Restoration	19
Roads including flood repairs	13
Fertilization	2
EAs Protested	16
EAs Appealed	9

EXECUTIVE SUMMARY FOR MONITORING REPORT

Monitoring Report - Fiscal Years 1996-1998

Introduction - This document represents the first 3 years of implementation monitoring of Eugene's Resource Management Plan (RMP) for which the Record of Decision was signed in June 1995. Included in this report are the projects that took place from June 1995.until September 1998. Effectiveness and validation monitoring will be conducted in subsequent years when projects mature or proceed long enough for the questions asked under these categories of monitoring to be answered. The term "management action/direction" discussed in the Resource Management Plan and this monitoring report is approximately equivalent to the term "standards and guidelines" used in the Record of Decision for the Northwest Forest Plan.

Background - The BLM planning regulations (43 CFR 1610.4-9) call for the monitoring and evaluation of RMPs at appropriate intervals.

Monitoring is an essential component of resource management because it provides information on the relative success of management strategies. The implementation of the RMP is being monitored to ensure that management actions: follow prescribed management direction (*implementation monitoring*), meet desired objectives (*effectiveness monitoring*), and are based on accurate assumptions (*validation monitoring*). Some effectiveness and most validation monitoring will be accomplished by formal research. The nature of the questions concerning effectiveness monitoring require some maturation of implemented projects in order to discern results. This and validation monitoring will be conducted as appropriate in subsequent years.

The monitoring process usually collects information on a sample basis. Monitoring could be so costly as to be prohibitive if not carefully and reasonably designed. Therefore, it is not necessary or desirable to monitor every management action or direction. Unnecessary detail and unacceptable costs are avoided by focusing on key monitoring questions and sampling procedures. The level and intensity of monitoring varies, depending on the sensitivity of the resource or area and the scope of the management activity.

Monitoring Overview - This monitoring report focuses on the implementation monitoring questions contained in the Resource Management Plan. This report does not include the monitoring identified in activity or project plans conducted by the Eugene District. The monitoring plan for the Resource Management Plan incorporates the Monitoring and Evaluation Plan for the Record of Decision for the Northwest Forest plan.

Monitoring, initiated through the Regional Interagency Executive Committee (RIEC), has also been done at multiple levels and scales with coordination of BLM and Forest Service units. At the request of the Regional Interagency Executive Committee, the Regional Ecosystem Office (REO) initiated a regional-scale pilot Implementation Monitoring Program. An interagency work group attached to the

Research and Monitoring Committee of the Regional Ecosystem Office produced a Final Draft Implementation Monitoring Guidance document. Based on this document and other work, an interagency monitoring team sampled BLM and Forest Service projects implemented under the new Forest Plan. In FY 1996, the interagency team monitored 10% of the BLM and Forest Service timber sales. A total of 43 sales were sampled that included 2 in the Eugene District (one in the Oregon Coast Province and one in the Willamette Province). The findings of this monitoring effort may be found in the Final Report, March 3, 1997, *Results of FY 1996 (Pilot Year) Implementation Monitoring Program for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl.* In FY 1997, the interagency team monitored 40 timber sales, 17 road projects, and 16 restoration projects. Eugene's Willamette Province had 2 timber sales, and 2 road projects reviewed. Eugene's Oregon Coast Province had one restoration project reviewed. The findings of this monitoring effort may be found in the First Draft Report, May 7, 1998, *Results of FY 1997 Implementation Monitoring Program for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl.* In FY 1998, the interagency team sampled timber sales over one million board feet that had some harvest activity (one timber sale per administration unit) and, as a pilot program, monitored 6 watersheds to do monitoring at a larger scale than at the project level. Eugene's Oregon Coast Province had one timber sale monitored in the Coast Range Resource Area.

The monitoring process is intended to be an iterative, adaptive process where we learn by doing. As results are evaluated, the process is expected to be adjusted as needed. Changes may be made in the monitoring process itself to increase clarity, efficiency, and usefulness of monitoring. Other adjustments may be made in District processes and procedures to increase our success in achieving implementation objectives.

The goal of management is to have very high compliance with all management action/direction or all standards and guidelines. Failure to achieve compliance will result in the evaluation aspect of adaptive management to determine if adjustments are necessary to correct deficiencies.

Monitoring Process and Approach - The Eugene District monitoring requirements are described in Appendix D of the Eugene RMP (pages 175-198).

Most types of projects are sampled at a 20% level. All projects meeting certain criteria are monitored, such as those with construction within Riparian Reserves.

The District Ecosystem Core Team, a group of senior resource specialists, conducted the monitoring. They assembled all projects completed for each fiscal year. All projects that had a Categorical Exclusion (CE) or Environmental Assessment (EA) were included in the pool to be sampled. The CE or EA were considered the "action" that varied in size from small localized projects to silvicultural contracts spanning the entire District. A monitoring question package derived from Appendix D of the Eugene RMP was prepared for the District.

Five categories were established to stratify projects into similar types for sampling to ensure that a variety of project types were included, and that some of all types of projects were monitored. The categories were (1) timber sales, (2) silvicultural projects, (3) roads and construction, (4) habitat restoration, and (5) other. A 20 percent random sample was selected from each category. Projects sampled for fiscal years 1996, 1997, and 1998 are shown in the following table.

Table 48 - Sampled Projects, Fiscal Years 1996, 1997, 1998 - Eugene District

	FY96	FY97	FY98
Timber Sales	--Petzold Road --Battle East --River Grub --Bear Alder --Woody Hayes --Camas Connection --Wendling	--Hazard Trees --McKenzie Blowdown Trees --Gowdyville Density Mgmt. --Tucker Creek 2 --Upper Wolf	--Torched Mill --Alma Over Density Mgmt. --Goodpasture
Silvicultural Projects	--Tree Planting --McKenzie RA* --Manual Release, CE #96-09	--South Valley PCT --Coast Range PCT	--South Valley Manual Maintenance & PCT
Roads and Construction	--High Road Restoration --ERFO Road Repair --Blagen Road --McGowan Creek Rd. Restoration --County Line Rd. Decommission.	--Eagle Rest/High Road Repair --Horn Butte Road --Owl Creek Road Repair --Hale Road Use Permit	--Road No. 22-3-18 Storm Damage Repair --WEYCO Culvert Replacement --Silver Creek CXT Installaton
Habitat Restoration	--Whittaker Creek Aquatic Habitat Improvement Project	--McKenzie Snag Creation --Native Seeding in the AMA	--McKenzie Snag Creation
Other	--Lake Creek Fish Ladder Repair --Silver Creek Boat Landing --McKenzie RA Blowdown --Danger Trees, McKenzie RA --U of W Seismic Site	--South Valley Roadside Blowdown --Lower Lake Creek Falls Parking Lot Restoration	--Nelson Ridge Quarry Permit

The Eugene District is separated into 3 Resource Areas. The Resource Area staffs prepared answers to the monitoring questions for the individual actions based on a review of the files and NEPA documentation. A monitoring team consisting of members of the District Ecosystem Core Team reviewed individual project monitoring packages.

Each year, some projects selected for monitoring had not been completed. For the purposes of monitoring, "completed" is defined as all ground disturbing work done for projects other than timber sales. For timber sales, "completed" is defined as yarding of the timber has been completed. Site preparation is not included but may be reexamined if deemed necessary at the time it is completed.

Only completed projects were monitored. If a project was not completed at the time it was selected for monitoring, it was carried over to the next monitoring period or when it was completed. The table below shows those carryover projects that are yet to be completed.

The table does not show those projects that were originally carried over to another fiscal year, but for which the monitoring has now been completed.

Table 49 - Carryover Projects, Fiscal Years 1996, 1997, 1998

	FY 1996	FY 1997	FY 1998
Timber Sales		--Gowdyville Density Mgmt. --Tucker Creek 2 --Upper Wolf	--Torched Mill --Alma Over Density Mgmt. --Goodpasture
Silvicultural Projects	None	None	None
Roads and Construction	None	None	None
Habitat Restoration	--Whittaker Creek Aquatic Habitat Restoration	None	None
Other	None	None	None

MONITORING RESULTS AND FINDINGS

The District Ecosystem Core Team has consistently found a high level of compliance with the Standards and Guidelines contained in the Eugene RMP and the Northwest Forest Plan. Field reviews of timber sales for all 3 fiscal years have indicated that the intent and requirements of the Standards and Guidelines have been met for the sampled and completed sales. Specifically, the team found that the Riparian Reserves, Green Tree Retention, snags and snag recruitment, and Coarse Woody Debris requirements had been satisfactorily implemented. It was noted that the District had undergone a rapid learning process (as well as learning better communication in the IDTs) after the NFP and Eugene RMP/ROD was completed.

The District continues to use adaptive management in applying techniques to achieve the S & G's. However, the following are concerns that have been identified through the District's learning process:

1. Small intermittent streams have been very difficult to locate in second growth stands.
2. Retention trees: size and distribution of the retention trees, and long term survivability of those trees remain a concern.
3. Obtaining proper distribution of coarse woody debris on second growth harvest areas because of the low levels of existing material.

GREEN TREE RETENTION - *In the General Forest Management Area (GFMA) the District is to retain 6 to 8 green trees per acres in regeneration harvest units. In Connectivity Blocks, the District is to retain 12 to 18 green trees per acre in regeneration harvest units. Retained trees are to be distributed in variable patterns in the unit to contribute to [future] stand diversity.*

In reviewing the intent and requirements of the RMP for green tree retention, the District determined that retained green trees were "biological legacies" and were not to be treated or intentionally damaged for snag recruitment (see snag recruitment below).

Based on this information, the District is meeting or exceeding RMP requirements for green tree retention, and is verifiable.

SNAGS AND SNAG RECRUITMENT - *Within the Matrix LUA the District is to retain snags within harvest units at levels sufficient to support species of cavity-nesting birds at 40 percent of potential population levels. This standard is to be met throughout the Matrix with per acre requirements met on average areas no larger than 40 acres.*

Within the Matrix LUA the District is to retain green trees for snag recruitment in harvest units where there will be a snag deficit during the next 30 years. These trees are in addition to the requirement for green tree retention.

During partial cut or regeneration harvests, the District is to reserve snags from cutting whenever feasible and to the extent necessary to meet snag habitat objectives. (Some snags may be removed for road construction, human safety, yarding or other reasons.)

Except where public safety is a concern, the District is to retain snags where they occur on lands not allocated to timber production. Unmerchantable snags also are to be left in timber harvest units to the extent compatible with other land uses. Timber sale contracts are to encourage loggers to retain all snags and nonmerchantable trees where such retention is compatible with other land uses.

The RMP assumed that, **beyond** the first 3 decades after a treatment, 6 to 8 retained green trees per acre within the GFMA, and 12 to 18 retained green trees per acre within Connectivity Blocks naturally would supply the snags needed to support species of cavity-nesting birds at 40% of potential population levels during the respective rotations. However, **within** 3 decades of a treatment, if a harvest unit might not have sufficient snags to support species of cavity-nesting birds at 40% of potential population levels, the District was to retain additional green trees in the unit at the time of treatment for snag recruitment.

To support species of cavity-nesting birds at 40% of potential population levels, the District determined that it must retain 1.7 snags per acre averaged over an area no larger than 40 acres (i.e., each 40-acre block of a sale unit must have at least 68 snags; blocks smaller than 40 acres must contain at least 1.7 snags multiplied by the number of acres in the block). This number might be reduced to as low as 1.3 snags/acre (52 snags on a 40 acres block) if the sale unit were adjacent to a Riparian or Late-Successional Reserve. All snags were to be greater than 11 inches dbh; at least 95% of the snags were to be greater than 15 inches dbh; at least 17% of the snags were to be greater than 17 inches dbh; and at least 2% of the snags were to be greater than 25 inches dbh. This direction applied to the Matrix LUA. Riparian Reserves and Late-Successional Reserves were separate LUAs and were not to be included within the 40-acre block.

The District is attempting to retain all existing snags that do not pose safety hazards and documenting the number of existing snags in units (including their diameters and decay classes) prior to harvest, or the proportion of snags that remain standing after treatments. Based on this information, therefore, the District is meeting RMP requirements for snag retention.

The District is making efforts to retain green trees for snag recruitment, and the District is providing sufficient numbers of snags during the first 30 years to maintain required populations of cavity-nesting birds.

COARSE WOODY DEBRIS RETENTION AND RECRUITMENT - *Within the Matrix LUA the District is to leave 240 linear feet of logs per acre greater than or equal to 20 inches in diameter. These logs are to reflect the species mix of the stand. Coarse woody debris already on the ground is to be retained to the extent possible during treatment.*

Based on monitoring, the District is now leaving required CWD within sale units. Actions to create CWD to meet the RMP requirement are adequate and verifiable. In addition, design features were added to the Environmental Analysis to save all class 3, 4, 5 decay class logs if operationally possible.

Field review of the timber sales indicated that in most instances, the intent and requirements of the Standards and Guidelines had been met for the sampled and completed sales. Resource Area staffs also found no violations of the Standards and Guidelines for other types of projects.

Recommendations - Implementation and Management - As a result of observed very high compliance with management action/direction in the past 3 years of monitoring, no implementation or management adjustments are recommended.

Clarification of Management Action/Direction - No adjustments are recommended.

Improvements to the Monitoring Plan and Process - The past 3 years have revealed that several of the monitoring questions were difficult to interpret given the original wording. The District Ecosystem Core Team may examine the questions and reword them so that they are easier for Resource Area staffs to interpret consistently.

CONCLUSIONS

The results of the first 3 years (Fiscal Years 1996, 1997, and 1998) of Implementation Monitoring indicate a very high degree of compliance with the management action/direction of the Resource Management Plan and, accordingly, the standards and guidelines of the Northwest Forest Plan. The results and the individual project monitoring packages are available in the District Monitoring Reports for each fiscal year.

Because of the high level of compliance, no major changes in management direction is suggested at this time. The results indicate a very conscientious implementation of the plan by highly informed and knowledgeable staff and managers.

Adaptive Management Areas - Landscape units designated for development and testing of technical and social approaches to achieving desired ecological, economic, and other social objectives.

Allowable Sale Quantity (ASQ) - The gross amount of timber volume, including salvage, that may be sold annually from a specified area over a stated period of time in accordance with the management plan. Formerly referred to as allowable cut."

Anadromous Fish - Fish that are born and reared in freshwater, move to the ocean to grow and mature, and return to freshwater to reproduce. Salmon, steelhead, and shad are examples.

Archaeological Site - A geographic locale that contains the material remains of prehistoric and/or historic human activity.

Area of Critical Environmental Concern (ACEC) - An area of BLM administered lands where special management attention is needed to protect and prevent irreparable damage to important historic, cultural or scenic values, fish and wildlife resources, or other natural systems or processes; or to protect life and provide safety from natural hazards.

Best Management Practices (BMP) - Methods, measures, or practices designed to prevent or reduce water pollution. Not limited to structural and nonstructural controls and procedures for operations and maintenance. Usually, BMPs are applied as a system of practices rather than a single practice.

Biological Diversity - The variety of life and its processes, including a complexity of species, communities, gene pools, and ecological function.

Candidate Species - Those plants and animals included in Federal Register "Notices of Review" that are being considered by the Fish and Wildlife Service (FWS) for listing as threatened or endangered. There are 2 categories that are of primary concern to BLM. These are:

> **Category 1.** Taxa for which the FWS has substantial information on hand to support proposing the species for listing as threatened or endangered. Listing proposals are either being prepared or have been delayed by higher priority listing work.
>
> **Category 2.** Taxa for which the FWS has information to indicate that listing is possibly appropriate. Additional information is being collected.

Cavity Nesters - Wildlife species, most frequently birds, that require cavities (holes) in trees for nesting and reproduction.

Commercial Thinning - The removal of merchantable trees from an even-aged stand to encourage growth of the remaining trees.

Cubic Foot - A unit of solid wood, one foot square and one foot thick.

Cumulative Effect - The impact that results from identified actions when they are added to other past, present, and reasonably foreseeable future actions regardless of who undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Density Management - Cutting of trees for the primary purpose of widening their spacing so that growth of remaining trees can be accelerated. Density management harvest can also be used to improve forest health, to open the forest canopy, or to accelerate the attainment of old growth characteristics, if maintenance or restoration of biological diversity is the objective.

District Designated Reserves (DDR) - Areas designated for the protection of specific resources, flora and fauna, and other values. These areas are not included in other land use allocations nor in the calculation of the ASQ.

Eligible River - A river or river segment found, through interdisciplinary team and, in some cases interagency review, to meet Wild and Scenic River Act criteria of being free flowing and possessing one or more Outstandingly Remarkable Values.

Endangered Species - Any species defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range and published in the Federal Register.

Environmental Assessment (EA) - A systematic analysis of site-specific BLM activities used to determine whether such activities have a significant effect on the quality of the human environment; and whether a formal Environmental Impact Statement is required; and to aid an agency's compliance with NEPA when no EIS is necessary.

General Forest Management Area (GFMA) - Forest land managed on a regeneration harvest cycle of 60-110 years. A biological legacy of 6 to 8 green trees per acre would be retained to assure forest health. Commercial thinning would be applied where practicable and where research indicates there would be gains in timber production.

Hazardous Materials - Anything that poses a substantive present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Land Use Allocations - Allocations that define allowable uses/activities, restricted uses/ activities, and prohibited uses/activities. They may be expressed in terms of area such as acres or miles, etc. Each allocation is associated with a specific management objective.

Late-Successional Forests - Forest seral stages that include mature and old growth age classes.

Matrix Lands - Federal land outside of reserves and special management areas that will be available for timber harvest at varying levels.

Noxious Plant/Weed - A plant specified by law as being especially undesirable, troublesome, and difficult to control.

O&C Lands - Public lands granted to the Oregon and California Railroad Company, and subsequently revested to the United States, that are managed by the Bureau of Land Management under the authority of the O&C Lands Act.

Off-Highway Vehicle (OHV) - Any motorized track or wheeled vehicle designed for cross-country travel over natural terrain. The term, "Off Highway Vehicle" will be used in place of the term "Off - Road Vehicle" to comply with the purposes of Executive Orders 11644 and 11989. The definition for both terms is the same.

> **Open:** Designated areas and trails where Off Highway Vehicles may be operated subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343.
>
> **Limited:** Designated areas and trails where Off Highway Vehicles are subject to restrictions limiting the number or types of vehicles, date, and time of use; limited to existing or designated roads and trails.
>
> **Closed:** Areas and trails where the use of Off Highway Vehicles is permanently or temporarily prohibited. Emergency use is allowed.

Outstanding Natural Area (ONA) - An area that contains unusual natural characteristics and is managed primarily for educational and recreational purposes.

Outstandingly Remarkable Values (ORV) - Values among those listed in Section 1 (b) of the Wild and Scenic Rivers Act: "scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values . . ." Other similar values that may be considered include ecological, biological or botanical, paleontological, hydrological, scientific, or research.

Precommmercial Thinning - The practice of removing some of the trees less than merchantable size from a stand so that remaining trees will grow faster.

Prescribed Fire - A fire burning under specified conditions that will accomplish certain planned objectives.

Regeneration Harvest - Timber harvest conducted with the partial objective of opening a forest stand to the point where favored tree species will be reestablished.

Regional Ecosystem Office (REO) - The main function of this office is to provide staff work and support to the Regional Interagency Executive Committee (RIEC) so the standards and guidelines in the forest management plan can be successfully implemented.

Regional Interagency Executive Committee (RIEC) - This group serves as the senior regional entity to assure the prompt, coordinated, and successful implementation of the forest management plan standards and guidelines at the regional level.

Research Natural Area (RNA) - An area that contains natural resource values of scientific interest and is managed primarily for research and educational purposes.

Resource Management Plan (RMP) - A land use plan prepared by the BLM under current regulations in accordance with the Federal Land Policy and Management Act.

Right-of-Way - A permit or an easement that authorizes the use of public lands for specified purposes, such as pipelines, roads, telephone lines, electric lines, reservoirs, and the lands covered by such an easement or permit.

Rural Interface Areas - Areas where BLM administered lands are adjacent to or intermingled with privately owned lands zoned for 1 to 20-acre lots or that already have residential development.

Seral Stages - The series of relatively transitory plant communities that develop during ecological succession from bare ground to the climax stage. There are five stages:

> **Early Seral Stage** - The period from disturbance to crown closure of conifer stands usually occurring from 0-15 years. Grass, herbs, or brush are plentiful.
>
> **Mid Seral Stage** - The period in the life of a forest stand from crown closure to ages 15-40. Due to stand density, brush, grass, or herbs rapidly decrease in the stand. Hiding cover may be present.
>
> **Late Seral Stage** - The period in the life of a forest stand from first merchantability to culmination of Mean Annual Increment. This is under a regime including commercial thinning, or to 100 years of age, depending on wildlife habitat needs. During this period, stand diversity is minimal, except that conifer mortality rates will be fairly rapid. Hiding and thermal cover may be present. Forage is minimal.
>
> **Mature Seral Stage** - The period in the life of a forest stand from Culmination of Mean Annual Increment to an old growth stage or to 200 years. This is a time of gradually increasing stand diversity. Hiding cover, thermal cover, and some forage may be present.

Old Growth - This stage constitutes the potential plant community capable of existing on a site given the frequency of natural disturbance events. For forest communities, this stage exists from approximately age 200 until when stand replacement occurs and secondary succession begins again. Depending on fire frequency and intensity, old growth forests may have different structures, species composition, and age distributions. In forests with longer periods between natural disturbance, the forest structure will be more even-aged at late mature or early old growth stages.

Short-Term - The period of time during which the RMP will be implemented; assumed to be 10 years.

Silvicultural Prescription -A professional plan for controlling the establishment, composition, constitution, and growth of forests.

Site Preparation - Any action taken in conjunction with a reforestation effort (natural or artificial) to create an environment that is favorable for survival of suitable trees during the first growing season. This environment can be created by altering ground cover, soil or microsite conditions, using biological, mechanical, or manual clearing, prescribed burns, herbicides or a combination of methods.

Visual Resource Management (VRM) - The inventory and planning actions to identify visual values and establish objectives for managing those values and the management actions to achieve visual management objectives.

Wild and Scenic River System - A National system of rivers or river segments that have been designated by Congress and the President as part of the National Wild and Scenic Rivers System (Public Law 90-542, 1968). Each designated river is classified as one of the following:

> **Wild River** -A river or section of a river free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. Designated wild as part of the National Wild and Scenic Rivers System.
>
> **Scenic River** -A river or section of a river free of impoundments, with shorelines or watersheds still largely primitive and undeveloped but accessible in places by roads. Designated scenic as part of the National Wild and Scenic Rivers System.
>
> **Recreational River** - A river or section of a river readily accessible by road or railroad, that may have some development along its shorelines, and that may have undergone some impoundment of diversion in the past. Designated recreational as part of the National Wild and Scenic Rivers System.

Acronyms/Abbreviations

ACEC - Area of Critical Environmental Concern
ACS - Aquatic Conservation Strategy
APS - Annual Program Summary
ASQ - Allowable Sale Quantity
BLM - Bureau of Land Management
CBWR - Coos Bay Wagon Road
C/DB - Connectivity/Diversity Blocks
CT - Commercial Thinning
CX - Categorical Exclusions
CWA - Clean Water Act
CWD - Coarse woody debris
CX - Categorical Exclusions
DM - Density Management
EA - Environmental Analysis
EIS - Environmental Impact Statement
ESA - Endangered Species Act
FONSI - Finding of No Significant Impacts
FY - Fiscal Year
GFMA - General Forest Management Area
GIS - Geographic Information System
IDT - Interdisciplinary Teams
LSR - Late-Successional Reserve
LUA - Land Use Allocation
MMBF - Million board feet
MOU - Memorandum of Understanding
NEPA - National Environmental Policy Act
NFP - Northwest Forest Plan
NMFS - National Marine Fisheries Service
O&C - Oregon and California Revested Lands
ODFW - Oregon Department of Fish and Wildlife
PACs - Province Advisory Councils
PL - Public Law
POC - Port-Orford Cedar
REO - Regional Ecosystem Office
RIEC - Regional Interagency Executive Committee
RMP - Resource Management Plan
RMP/ROD- The *Eugene District Resource Management Plan* and *Record of Decision*
ROD - Record of Decision
RR - Riparian Reserve
R/W - Right-of-Way
SEIS - Supplemental Environmental Impact Statement
S&G - Standards and Guidelines
S&M - Survey and Manage
USFS - U.S. Forest Service
USFWS - U.S. Fish and Wildlife Service

SUMMARY OF PLAN MAINTENANCE ACTIONS SINCE 1995

The Eugene Resource Management Plan Record of Decision was approved in May 1995. Since that time, Eugene has begun implementation of the plan across the entire spectrum of resources and land use allocations. As the plan is implemented it sometimes becomes necessary to make minor changes, refinements, or clarifications of the plan. Potential minor changes, refinements, or clarifications in the plan may take the form of maintenance actions. Maintenance actions respond to minor data changes and incorporation of activity plans. This maintenance is limited to further refining or documenting a previously approved decision incorporated in the plan. Plan maintenance will not result in expansion of the scope of resource uses or restriction or change the terms, conditions, and decisions of the approved Resource Management Plan. Maintenance actions are not considered a plan amendment and do not require the formal public involvement and interagency coordination process undertaken for plan amendments.

Important plan maintenance will be documented in the Eugene District Annual Program Summary. Example of possible plan maintenance issues that would involve clarification may include the level of accuracy of measurements needed to establish Riparian Reserve widths, measurement of coarse woody debris, etc. Much of this type of clarification or refinement involves issues that have been examined by the Regional Ecosystem Office (REO) and contained in subsequent instruction memos from the BLM Oregon State Office. Depending on the issue, not all plan maintenance will necessarily be reviewed and coordinated with the Regional Ecosystem Office or

Provincial Advisory Committee. Plan maintenance is also described in the Eugene District Resource Management Plan Record of Decision, page 109.

Summaries of Plan Maintenance
June 1995 thru September 1998

1996

Oregon State Office Guidance

1. Memo directing changes in surveys for arthropods 11/8/96 - BLM IB-OR-97-045
2. Memo implementing REO memo on management of lynx 6/28/96 - BLM IM-OR-96-97
3. Memo on protocols for S&M amphibians 3/19/96 - BLM IB-OR-96-006
4. Memo on dwarf mistletoe 8/15/96 - BLM IB-OR-95-443
5. Memo on plan maintenance 7/5/96 - OR IB-OR-96-294
6. Memo on implementing CWD S&G 11/19/96 - BLM IB-OR-96-064
7. Great Gray Owl protocol: 5/12/95
8. Adjustment to Great Gray Owl protocol: IB OR-97-311

Clarification Originating at the Eugene BLM District - The guidance shown below is in a draft or interim stage. These interim drafts have not been formally approved and completed as plan maintenance.

1. Snag recruitment in the Matrix (in progress)
2. Hardwood retention in harvest areas
3. Maximum harvest area size
4. Management of riparian features when they do not clearly meet the definitions of Riparian Reserves as stated in the ROD
5. Reserves surrounding wetlands of less than 1 acre
6. Yarding corridors through Riparian Reserves
7. Criteria to be applied in determination of regeneration or intermediate harvest
8. Silvicultural treatments to enhance Connectivity Blocks

1997

The Eugene District continually works on maintenance of the Eugene District Resource Management Plan. The following refinements and clarifications to the Resource Management Plan have been completed.

- Area control rotation of connectivity blocks - dated 6/23/97 - Permits greater flexibility in amounts of harvest from connectivity blocks to better achieve objectives of connectivity blocks.

- Clarification of purpose of connectivity/diversity blocks in the South Valley Resource Area dated 7/18/97.

- Perpendicular yarding across stream channels dated 9/2/97 allows yarding angles to streams to be between 45 and 90 degrees.

MEMORANDUM REFERENCE	**SUBJECT SUMMARY OR DESCRIPTION**
REO Memorandum dated 4/7/95	• Clarifies access for key watersheds, how to meet S&G for no net increases in roads where third parties have access rights.
REO Memorandum dated	• Memo exempting certain Silvicultural activities from LSR assessment requirements. Interagency Memorandum dated 7/5/95
BLM IM OR-95-123	• Memo clarifying when watershed analysis is and is not required for minor activities in Riparian Reserves.
REO Memorandum dated 7/24/95	• Memo changing status of dwarf mistletoe in Table C-3 of the ROD.
REO Memorandum dated 12/15/95	• Memo clarifying adaptive management process
REO Memorandum dated 12/15/95	• Memo clarifying REO review of LSR assessments
REO Memorandum dated 4/26/96	• Additional guidance on LSR assessment reviews
REO Memorandum dated 9/6/96	• Draft memo limiting surveys for certain arthropods to southern range.
REO Memorandum dated 6/11/96	• Memo changing provisions regarding the management of the lynx.
REO Memorandum dated 7/9/96	• Memo exempting certain commercial thinning projects in LSRs and MLSAs from REO review.
REO Memorandum dated 9/30/96	• Memo amending commercial thinning exemption in LSRs.
Interagency Memorandum dated 11/1/96 BLM IM-OR-97-007	• Interagency Memo clarifying the implementation of S&M component 2 species; contains definitions of S&G terms such as "ground disturbing" and "implemented."
REO Memorandum dated 2/27/97	• Memo clarifying requirement by REO to review AMA plans.
REO Memorandum dated 3/22/95	• Memo reviewing BLM site potential tree height determination.
REO Memorandum dated 10/13/94	• Memo reviewing BLM's interpretation of Coarse Woody Debris requirements.
REO Memorandum dated	• Removal of *Buxbazlmia p.* From S&M list.
REO Memorandum dated 8/31/95	• Memo on LSR boundary adjustments.

1998

Clarification when a project is implemented in context of component 2 Survey and Manage.
S&G C-5 of NFP ROD and Management Action/Direction 2.c., page 22 of the RMP ROD states that "surveys must precede the design of activities that will be implemented in [FY] 1997 or later". The interagency interpretation is that the "NEPA decision equals implemented" in context of component 2 species survey requirements. Projects with NEPA decisions to be signed before June 1, 1997 have transition rules that are described in IM OR-97-007 (Information from Oregon State Office Instruction Memorandum OR-97-007).

Conversion to Cubic Measurement System.
Beginning in fiscal year 1998 (October 1997 sales), all timber sales (negotiated and advertised) will be measured and sold based upon cubic measurement rules. All timber sales will be sold based upon volume of hundred cubic feet (CCF). The Eugene District RMP/ROD declared an allowable harvest level of 6.1 million cubic feet. Information is from Oregon State Office Instruction Memorandum OR-97-045.

Oregon Public Lands Transfer and Protection Act of 1998.
Requirements affecting the District are a policy of no-net-loss of O&C or Public Domain Land in carrying out sales, purchases, and exchanges in the geographic area which includes the Eugene District.

Change to Amphibian protocol: 6/29/98 IB OR-246.
Lichen Protocol: 3/12/98 IM 98-38
Bryophyte protocol: 12/11/97 IB OR 98-51
Fungus protocol: 9/17/98 IM 98-103
Extension of Red Tree Vole Interim Guidance: September 1998

Correction on LUA at Tyrrell and Dorena Seed Orchards, and other minor existing administrative sites.

Some acres and sites that were inadvertently labeled as Connectivity and LSR Land Use Allocation will be added to the District Reserves (DDR) Land Use Allocation on page 22 and 23 of the Eugene RMP/ROD. This requires re-wording the first full paragraph on page 23 to read as follows : ***The types of administratively withdrawn areas, also known as District Reserves (DDR), are areas that include special resource values or special administrative uses such as seed orchards, air navigation sites, communication sites, and electric power generation sites. These 3,000 acres include 1,821 acres of habitat encompassing Threatened or Endangered plants and animals, 575 acres representing Relic Forest Islands, 1,158 acres of Riparian Reserves, 274 acres of unmapped Late-Successional Reserves for Spotted Owls, and 187 acres of fragile sites. These acres overlap which account for why they total over 3,000 acres. In addition, the Tyrrell Seed Orchard totals 833 acres and the Dorena Seed Orchard totals 142 acres. The existing air and communication sites and power generation sites total less than 100 acres.***

RESOURCE MANAGEMENT PLAN AMENDMENT

The Eugene District Resource Management Plan (RMP) was approved in June 1995. Several potential land tenure adjustments were subsequently identified that required amendment of the RMP before they can be completed. These potential adjustments include a small land exchange with John Hancock Mutual Life Insurance Company (Hancock) in western Lane and Douglas counties, sale of 2 small tracts to permanently resolve inadvertent occupancy trespasses, and sale or exchange of a solid waste transfer site and former rural landfill to Lane County.

A notice of intent to prepare an RMP Amendment was published in the *Federal Register* on September 18, 1997. The proposed amendment was distributed to the public for review and potential protest on August 26, 1998. No objections or protests were received during the 30-day review period and the Oregon State Director signed the authorizations to implement the amendment on October 22, 1998.

The amendment changed the RMP Land Tenure Zone designations of 4 parcels of land to enable completion of the 4 identified land tenure adjustments and added language to allow the disposal of lands without further plan amendment where survey hiatuses and unintentional occupancy trespasses are discovered in the future that meet legal disposal criteria.

The decision to complete the Hancock Exchange became final on October 13, 1998 and exchange completion is anticipated early in 1999. Processing of the other 3 land tenure adjustments has been initiated with completion estimated for late 1999 or 2000.

FY 1998 MONITORING REPORT

MONITORING REPORT
PROGRAM LEVEL QUESTIONS

Introduction - The following questions are those in Appendix D of the Eugene RMP/ROD. The answers were prepared as part of the annual monitoring required by the Eugene RMP, and excerpted from the Eugene District 1998 Monitoring Report. Sections that did not have program level questions within them are included for reference.

1. SEIS SPECIAL ATTENTION SPECIES (S&M, PROTECTION BUFFER SP)

S&M #4 - Are the habitats for amphibians, mammals, bryophytes, mollusks, vascular plants, fungi, lichens, and species listed in Appendix B being surveyed as directed in the SEIS/ROD? *Refers to Protection Buffer and Component 2 Species.*

YES _X_ NO ___ N/A ___

Surveys for selected Survey and Manage Component 2 species and Protection Buffer Species have been implemented for projects that will be implemented in FY99.

S&M #5 - Are high priority sites for species management being identified (refers to Survey and Manage Strategy 3 Species)? *Information on high priority sites for species management will be generated from Extensive Surveys implemented by the REO and may/may not be applicable to this District depending on survey results.*

YES ___ NO ___ N/A _X_

Extensive Surveys have not yet been implemented on the Eugene District.

S&M #6 - Are general regional surveys (Survey and Manage Strategy 4 Species) being conducted to acquire additional information and to determine necessary levels of protection for arthropods and fungi species that were not classed as rare and endemic, bryophytes, and lichens? *Protection levels for Survey and Manage Component 4 Species will be identified during General Regional Surveys which will be implemented by the REO. Protection levels for these species may/may not be applicable to this District depending on survey results.*

YES ___ NO ___ N/A _X_

General Regional Surveys have not yet been implemented on the Eugene District.

2. SPECIAL STATUS SPECIES

SSS #2 - Are the actions identified in plans to recover Special Status Species being implemented in a timely manner?

YES _X_ NO ___ N/A ___

Which actions were implemented; which (if any) were not?

The Eugene District coordinated a meeting with the U.S. Fish and Wildlife Service in FY98 to identify high priority needs for *Lomatium bradshawii* (FE). Actions implemented in FY98 were fully consistent with these priorities and included:

1. Conducting demographic studies on *Lomatium bradshawii*
2. Prescribed burning to enhance Special Status Species habitat, including *Lomatium bradshawii*
3. Purchase of 50 acres to secure habitat for Special Status Species, including *Lomatium bradshawii*
4. Completed genetic studies for *Lomatium bradshawii*

Monitoring for a variety of other Special Status plant species was also implemented to track the condition of populations.

The District treated over 100 acres of future bald eagle habitat within the Late-Successional Reserve Land use allocation to improve nesting conditions in Bald Eagle Habitat Areas.

The District completed mid-winter surveys along approximately 20 miles of the Lower McKenzie River survey route, on 5,000 acres of reservoir habitat, and along the Coburg Hills Roost Sites. The District monitored active nests on Osborn Knob, Warner Lake, and Mt. Pisgah, and on Dorena and Cottage Grove reservoirs; all five nests were active and at least 5 young fledged. The District monitored the suspected Coburg Hills Winter Roost, and completed mid-winter roost surveys along an 18-mile road transect in the Triangle Lake area and a 31-mile road transect on the mid-Siuslaw River. The District and OSU completed a cooperative aerial nesting survey along the McKenzie River. The District monitored the Jones Swamp eagle nest site for occupancy; this was the first year since the nest was discovered in 1990 that no eagles nested there.

The District exchanged information with the Pacific Northwest Research Station (PNW) on the results of the validation monitoring of 46 spotted owl sites. The District surveyed 66,000 acres, and 20 project areas, for spotted owls, and monitored owl activity at 105 known sites, banding new birds. The District contributed vehicles and funding toward the NCASI Adaptive Management Monitoring of Northern Spotted Owls study, completed coordinated monitoring of sale-affected sites with private consultants, and monitored BLM sale-affected sites in the South Valley East and Willamette Valley areas.

The District completed the Esmo-Whitt, Lower Siuslaw, and Big River/Cottage Grove watershed analyses, and began the Wildcat and Sharp's Creek watershed analyses. These analyses included discussions on the state of spotted owl habitats and recommendations for future management. The District completed plans for three timber sales, totaling 349 acres, within the Late-Successional Reserve Land use allocation. The primary intent of these plans were to improve late-Successional forest conditions.

The District surveyed for marbled murrelets in 10 areas proposed for timber sales or other projects, and monitored murrelet occurrences in two other areas of interest. For the second year, the District tested the effectiveness of high frequency radar to detect murrelets as compared to on-ground personnel. As in the first year, and under certain conditions, radar was determined to be superior to ground crews in detecting these birds. Certain factors such as heavy precipitation, topography and canopy closure tend to reduce radar's effectiveness. Consequently, this technology can not be used to replace traditional survey crews in all field situations.

The District incorporated guidelines of the murrelet Recovery Plan into all proposed actions (1,217 habitat modification actions and 1,615 additional actions that only cause disturbances during critical nesting periods).

The District completed surveys to protocol for the 4 Survey & Manage mollusk species that occur here on 1,749 acres, finding 293 occupied sites.

The District updated the list of sensitive species (Bureau Sensitive, Assessment, Tracking as well as species with State and Federal and ONHP classifications) that are known or suspected to occur here. The District completed detailed analysis of 4 of the 11 sensitive species that might be at risk in the District under the Northwest Forest Plan and developed management recommendations. The District began evaluating a fifth species. The District helped develop and test regional management recommendations for Survey & Manage mollusk species, and incorporated these recommendations into proposed timber sales and other actions.

SSS #3 - What coordination with other agencies has occurred in the management of Special Status Species? *Identify agency and coordination efforts.*

Coordination on the management of Special Status Species occurred as follows:

1. Informational meetings with the U. S. Fish and Wildlife on the management of *Lomatium bradshawii* (FE) and *Lupinus sulphureus* var. *kincaidii* (PFT)
2. Implemented a variety of Challenge Cost Share Projects including the following:
    a. A Genetic Study of *Cimicifuga elata* populations (Oregon State University)
    b. Response of *Erigeron decumbens* var. *decumbens* to repeated burns (Oregon State University)
    c. Population monitoring for Bradshaw's lomatium at Long Tom ACEC (Oregon Department of Agriculture)
    d. Propagating and growing the *Cypripedium montanum* (Native Plant Society of Oregon)

The District completed consultations with the U.S. Fish and Wildlife Service on all proposed habitat modification actions and disturbance actions that might have affected federally listed or proposed species, or their Critical Habitats or proposed Critical Habitats. All completed projects conformed, or were amended to conform, to the requested conservation recommendations and mandatory terms and conditions.

In cooperation with the University of Washington, The Nature Conservancy and the National Fish and Wildlife Foundation, the District completed the fourth year of a five year study to restore habitat for the federally proposed Fender's blue butterfly and its host plant, the federally proposed Kincaid's lupine. This is being accomplished by comparing various methods of noxious plant control and establishment of desired native plants including Kincaid's lupine in wetland prairies of the Willamette Valley. With each year, weed control methods have met with increased success, although artificial germination of the lupine has not yet proven to be effective.

SSS #4 - What land acquisitions occurred or are under way to facilitate the management and recovery of Special Status Species?

Land acquisitions under the West Eugene Wetlands Project are still occurring. These accessions are acquiring wetland habitat for a suite of Special Status plant and animal species.

How many acres were or will be acquired and which species will benefit?

In FY98 50 acres were acquired for Special Status plant species. In FY99, 500 - 700 additional acres are being considered for acquisition. Some of these acres will provide habitat for Special Status plant species.

The District, working with the West Eugene Wetlands Partnership to implement the West Eugene Wetlands Plan, acquired 7 tracts covering 111 acres of wetlands and associated habitats, including some high value wetland prairie habitat. Another 373 acres are in "pending acquisition" status.

SSS #5 - What site specific plans for the recovery of Special Status Species were or are being developed?

A Draft Interagency Conservation Strategy is being developed by The Nature Conservancy for the BLM for several Special Status species within the West Eugene Project Area.

Management Guidelines are currently being drafted for *Aster vialis* (wayside aster).

The District continues to implement the District Fish and Wildlife 2000 program strategy, which contains objectives and actions for the conservation and recovery of special status species.

The District is completing a habitat management plan for the management of Bald Eagle Habitat Areas (5,000 acres) in the McKenzie Resource Area.

SSS #6 - What type of analysis is being implemented that ascertains species requirements or enhances the recovery or survival of a species?

Also see SSS #2.

Ecological and management treatment monitoring occurred for several rare plant species as per Recovery Plan and Conservation Strategies, including *Lomatium bradshawii*, *Cimicifuga elata*, and *Frasera umpquaensis* to track the condition of the species. Additional monitoring occurred for several other Special Status plant species outside of conservation planning documents.

The District sampled invertebrate species in oak woodlands, sending unidentified specimens to information to OSU for identification. The District completed surveys for red tree voles on 72 square miles and tested the regional survey protocol. The District coordinated with Weyerhaeuser Company and surveyed the bat community in the Vida/McKenzie Watershed and identified roost locations as part of a two year project. A model of habitat parameters for these bat species was initiated in 1997 and a final report is due in March 1999.

SSS #7 - What is the status of on-the-ground efforts to maintain or restore the community structure, species composition, and ecological processes of Special Status plant and animal habitat?

Also see SSS #2, 3, 4 and 6.

Prescribed burning was implemented within the West Eugene Wetlands project area to control invasion of woody species into prairie communities and to assure maintenance of native plant communities, including Special Status species.

3. SPECIAL AREAS

SA #2 - What is the status of the preparation, revision, and implementation of ACEC management plans?

Existing ACEC management plans are being implemented.

Management Plans for new ACEC have not yet been developed.

SA #3 - Are interpretive programs and recreation uses being developed and encouraged in ONAs?

YES _X_ NO ___ N/A ___

Information is currently being gathered on some of these sites to more fully understand the limitations as well as key resource values of the sites.

Formal plans have yet to be developed. Lake Creek Falls ACEC/ONA has fish ladders and anadromous fish runs interpreted at the site with additional interpretive facilities planned with pipeline funds and the implementation of the Lower Lake Creek SRMA plan.

Are the outstanding values of the ONAs being protected from damage?

YES _X_ NO ___ N/A ___

If not identify problems:

SA #4 - What environmental education and research initiatives and programs are occurring in the RNAs and EEAs?

None currently identified.

SA #6 - Are actions being identified that are needed to maintain or restore the important values of the Special Areas?

YES _X_ NO ___ N/A ___

Actions are being identified to maintain or restore important values of Special Areas. These include:

1. OHV trespass at Horse Rock Ridge ACEC/RNA
   OHV access control fence built on west ingress area, access trail blocked on east ingress, area posted at both ends, and user groups contacted to assist with protection.

2. OHV trespass at Heceta Dunes ACEC/ONA
   - Evaluation of risk areas underway. Posting of OHV closure planned for FY99.

3. Mt. Bicycle trespass at Cougar Mountain Yew Grove ACEC
   - Trespass investigated and mitigation action planned for FY99.

4. Woody plant and noxious weed invasion on Dorena Prairie (proposed) ACEC
5. Woody plant invasion on Long Tom ACEC

6. Lake Creek Falls ACEC/ONA
   - On site visitor management provided in FY98. Special Rules established, posted and enforced.

7. Hult Marsh ACEC
   - OHV barriers placed and maintained, OHV damage mitigated.

Are the actions being implemented?

YES _X_ NO ___ N/A ___

Signs are being posted and fences are being installed where appropriate to mitigate trespass into areas. Some areas are being periodically monitored to alert managers of inappropriate uses.

Site enhancement, using mowing or prescribed burning, are on going efforts to maintain wet and dry prairie communities.

4. **RIPARIAN RESERVES (NO PROGRAM LEVEL Q)** (See ACS section in the text of this document)

5. **LATE-SUCCESSIONAL RESERVES (NO PROGRAM LEVEL Q)**

LSR #1 - What is the status of the preparation of assessment and fire plans for Late-Successional Reserves ?

Oregon Coast Province LSR Assessment (R0267 & R0268) completed in October 1996. South Cascades LSR Assessment (R0222) completed in January 1998. Both assessments contain fire management plans.

LSR #2 - What activities were conducted or authorized within Late-Successional Reserves, and how were they compatible with the objectives in the Late-Successional Reserve Assessment? Were the activities consistent with SEIS/ROD Standards and Guidelines, RMP management direction, Regional Ecosystem Office (REO) review requirements and the Late-Successional Reserve Assessment?

A total of 49 projects or authorized uses were conducted or authorized within Late-Successional Reserves in FY 96, 97, and 98 in the Eugene District. Projects were reviewed by ID teams prior to implementation and all were found to be consistent and compatible with the objectives of the approved LSR assessments and RMP Standards and Guidelines. See the respective fiscal year monitoring report for a complete listing of projects within LSR's.

LSR #3 - What is the status of development and implementation of plans to eliminate or control nonnative species that adversely impact late-Successional objectives?

Roadside inventories adjacent to the LSRs were completed in 1996. Native seed grow out is ongoing with native seed collection and grow out contracts district wide. Noxious weed inventory completed in the Coast Range Resource Area, control strategy yet to be developed. Knapweed (a noxious weed) was manually pulled or mowed by contract and will continue. ODA Experimental biocontrol in the Horton area for knapweed. Scotch broom (a noxious weed) removal contracts were implemented as well as spot removal of plants that could become problems along access routes to timber sales. Manual control of noxious weeds where high resource value is at risk will be continued.

6. **ADAPTIVE MANAGEMENT AREAS**

AMA #1 - Are the AMA plans being developed, and do they establish future desired conditions?

YES _X_ NO ___ N/A ___

An AMA guide was developed that established guiding principles and themes.

7. **MATRIX (NO PROGRAM LEVEL Q)**

8. **AIR QUALITY (NO PROGRAM LEVEL Q)**

9. **SOIL AND WATER (NO PROGRAM LEVEL Q)**

S&W #3 - What is the status of identification of in stream flow needs for the maintenance of channel conditions, aquatic habitat, and riparian resources?

BLM has gauging stations and uses USGS gauging stations. Most of the work for identifying in-stream needs has been data gathering. Riparian Reserves identified during timber sale analysis and design maintains options to address the issue at a later date.

S&W #4 - What watershed restoration projects are being developed and implemented?

Stream habitat restoration and riparian restoration projects have been developed, implemented, and maintained.

Damage incurred during the 1996 flood continued to be repaired. Other watershed restoration projects included 22 acres of Riparian Reserve thinning, and 13 miles of road decommissioning.

Through the timber sale planning process, roads within or adjacent to units that need some type of restoration work have been identified and discussed in the timber sale EA. The restoration work would include decommissioning a road, replace culverts and other type of improvements.

Other road related projects included closing unauthorized dirt spur roads accessing sensitive plants sites, and replacing culverts to provide for aquatic organism passage and to accommodate a 100-year storm event. In addition, the Wilson Creek Stream Restoration project improved native fish habitat along 300 feet of stream. Four road repair projects were completed; these roads were damaged in the 1996 storm events.

Stream gauging stations were washed out during February 1996 flooding, and, to date, have not been reinstalled. An effort has been initiated to maximize the use of present in and historic USGS gaging efforts to better address this issue. Temperature monitoring was conducted on 50 sites in FY99. This monitoring data is relevant for future identification of stream flows necessary to support water temperatures for beneficial uses such as cold water fisheries.

S&W #5 - What fuel treatment and fire suppression strategies have been developed to meet Aquatic Conservation Strategy objectives?

The LSR Assessment for LSR 0267/0268 identifies management triggers when fuels treatment would be considered appropriate. S&Gs at C-35 and -36 would be implemented as needed.

The LSR Assessment identifies management triggers when fuels treatment would be considered appropriate. Standards and Guidelines at C-35, 36 would be implemented as needed.

Fuel treatments for timber sales have been designed to stay out of the riparian reserves.

S&W #6 - What is the status of development of road or transportation management plans to meet Aquatic Conservation Strategy objectives?

The Shotgun and the First Iteration Row River Transportation Plans were completed in FY98. The Wildcat and the Big River/Cottage Grove plans were initiated in FY98 and have not been completed.

Roads damaged by the February 1996 floods were evaluated as to whether they were needed for present and future use.

S&W #7 - What is the status of preparation of criteria and standards that govern the operation, maintenance, and design for construction and reconstruction of roads?

NWFP S&Gs and RMP BMPs are being applied on a site-specific basis, where appropriate.

Consistent with the ROD, standard road construction engineering guidelines are utilized on a site specific basis.

S&W #8 - What is the status of the reconstruction of roads and associated drainage features identified in watershed analysis as posing a substantial risk?

1. Selected culverts are being replaced to provide for 100 year event flows and provide fish passage.

   Roads damaged by floods are being repaired according to the standards and guides of the Forest Plan, and environmental (EA &CE) analysis is used as appropriate to determine repair design features.

2. What is the status of closure or elimination of roads to further Aquatic Conservation Strategy objectives and to reduce the overall road mileage within Key Watersheds?

   The road density in the Bear-Marten watershed is 2.4 miles on BLM lands. The Resource Area will be working on a transportation plan for the Bear-Marten in fiscal year 1999.

3. If funding is insufficient to implement road mileage reductions, are construction and authorizations through discretionary permits denied to prevent a net increase in road mileage in Key Watersheds?

YES ____ NO ____ N/A X

S&W #9 - What is the status of review of ongoing research in Key Watersheds to ensure that significant risk to the watershed does not exist?

Identify: No research or management activity has occurred in the Key Watersheds. A landscape design for the BLM portion of the Central Cascades Adaptive Management Area will be completed in FY 99.

S&W #10 - What is the status of evaluation of recreation, interpretive, and user-enhancement activities/facilities to determine their effects on the watershed?

No formal site specific evaluations have been made other than the routine yearly maintenance evaluations that would identify problems and corrective action if needed. The Mohawk and Lower Lake Creek RAMPs and environmental assessments were completed and specific project plans for implementation are in process.

What is the status of eliminating or relocating these activities/facilities when found to be in conflict with Aquatic Conservation Strategy objectives?

None in conflict with ACS at this time.

S&W #11 - What is the status of cooperation with other agencies in the development of watershed-based Research Management Plans and other cooperative agreements to meet Aquatic Conservation Strategy objectives?

Currently working or cooperating with the following agencies:

- Long Tom Watershed Council and Siuslaw Watershed Council.
- Siuslaw Soil and Water Conservation District and the Natural Resource Conservation Service.
- Nursery Technical Coop at Oregon State University (Study of the Effects of Different Levels of Fertilization on WRC in Riparian Areas).
- PNW / Cooperative Forest Ecosystem Research (CFER) working on the Middle McKenzie Landscape Design.
- Watershed Cumulative Effects Research Coop-Links with Rocky Mountain Research Station (USFS) and the National Council for Air and Stream Improvement (NCASI),

UC Berkeley, UC Davis and PNW.

- Agreement with the Rocky Mountain Research Station (USFS) - Road Sediment Research Study. We have agreements with Willamette Industries, Weyerhaeuser, and Roseburg Resources to gather data for this study on their lands.
- Western Oregon Density Management Study - (Ten High Density Management Study Area).
- Formal and Informal Communications with other agencies; USFW, ODFW, NMFS, University of Washington Stand Management Cooperative.

McKenzie Resource Area has worked with 3 watershed councils in conducting water quality monitoring. Within the Central Cascades Adaptive Management Area, relationships have been developed with the research community to meet CCAMA goals.

What is the status of cooperation with other agencies to identify and eliminate wild ungulate impacts that are inconsistent with attainment of Aquatic Conservation Strategy objectives?

No impacts of concern have been identified to date. In general, silvicultural practices include tubing of new seedlings planted in riparian reserves or other areas where wild ungulates damage may be expected.

10. WILDLIFE HABITAT

WH #3 - What is the status of designing and implementing wildlife restoration projects?

The District worked with the West Eugene Wetlands Partnership to complete two site restoration plans and develop two others on West Eugene Wetland Project lands. Wetland restoration continued on one area as a follow-up to a 1997 project and was initiated on 2 additional sites. Primary species benefitting from these projects include migratory birds (Mgt. Objective 9).

Using motion triggered cameras, the District surveyed 900 acres for the presence of marten and fishers in the Roman Nose and Upper Druggs Creek areas, and completed protocol surveys for carnivores and furbearers on 5,500 acres in the Coast Range Late-Successional Reserve. No special status species were identified.

The District created 78 wildlife structures in standing live trees and down logs on 200 acres within the Late-Successional Reserve Land use allocation. These structures included artificial nest platforms for osprey and bald eagles, cavities for species ranging from black bears to tree swallows, bat roost crevices, and other structures that could be utilized by species from insects to large mammals. The District created 350 snags and 870 additional wildlife structures (artificial cavities, bat roosts, amphibian refugia and mammal dens) in several areas within the Late-Successional Reserve Land use allocation. The District began work on 130 acres of snag creation and residual tree development in the Haight Creek Late-Successional Reserve; this work will be completed in 1999. The District thinned <25 year-old forest plantations to 20x20 spacing and released individual trees on 344 acres (4 trees/acre) within <40 year-old forest stands to develop late-Successional forest conditions in this area. The District topped "danger" snags in rights-of-way within the Late-Successional Reserve to provide down wood and maintain portions of snags that no longer threaten public safety.

The District created 1,300 snags on 984 acres within the Matrix Land use allocation within the Mohawk / McGowan Watershed, and treated 100 acres in the Bottom Line Density Management to create cavities for species that nest in secondary cavities. The District enhanced 200 acres of upland habitat by adding coarse woody debris from other sites.

The District began mapping and evaluating oak woodland habitats, and sampling invertebrate species in these habitats, for eventual habitat enhancement and protection.

The District implemented a Oak Woodland Habitat Assessment for 23 sites in the District. The assessment was contracted out and documented each sites current condition (data received). The final report (due early February 1999) will identify historical/reference condition, outline the potential benefitting wildlife communities (literature search and modeling) and restoration opportunities and techniques (literature search). The District contacted potential partners for the enhancement and protection of oak woodland habitats and plant and animal communities.

The District monitored 76 snags in the Coast Range for bat usage. Utilizing a snag model based on deformities, aspect and other criteria, the District determined whether snags were fit or unfit for bat roosts. Actual bat observations were compared to predicted usage according to the model. A preliminary report verified that this model was appropriate for predicting bat usage of snags with certain characteristics.

Surveys by the local Audubon Society located breeding grasshopper sparrows on West Eugene Wetland project lands for the second year in a row. The District maintained public use restrictions that provided protection of the nesting habitat. The District surveyed 11 stands of mid-seral habitats (1,000 acres) for Neotropical migratory birds, compiled data for the Oregon Bird Atlas hexagon project (1,350 acres), and assisted a research study on Neotropical birds.

The District began developing management recommendations for northern goshawks that nest in the Matrix Land use allocation. The District continued to survey the two historic goshawk nest sites and adjacent areas in the Coast Range Resource Area; no nesting goshawks were found. The District monitored 720 acres of known habitat for nesting northern goshawks, locating one new active nest and an active alternate nest to a nest found in 1987, and implemented management strategies to maintain goshawks on the District. The District, in cooperation with volunteers, updated 20 osprey nest site locations, and continued to update and improve nesting data for osprey with the Oregon Department of Fish and Wildlife.

The District reduced road densities, where possible, through the decommissioning and seasonal closures of 25 miles of roads, and began work on a transportation management plan to close or decommission unneeded roads to benefit natural resources including elk habitat. The District included management objectives for elk in the Sharp's Creek watershed analysis.

The District evaluated elk emphasis areas in the Cottage Grove/Big River Transportation Management Plan and developed management strategies to reduce the impacts of human intrusions in these areas.

WH #4 - What is the status of designing and constructing wildlife interpretive and other user-enhancement facilities?

District biologists made presentations to local grade school children at a variety of venues. Two presentations on the Wildlife Tree Enhancement Project were made, one to the Leadership Team and the second to the McKenzie Resource Area. The District made presentations to, and led a workshop for, more than 100 students at Lane Community College on waterfowl management. The District made a presentation to the Senior Birders & Scientist Club regarding the Partners in Flight program.

11. FISH HABITAT (NO PROGRAM LEVEL Q)

12. CULTURAL RESOURCES

CR #2 - What mechanisms have been developed to describe past landscapes and the role of humans in shaping those landscapes? *Note: CR #2 is not considered a reasonable implementation monitoring question, this question will be modified in the future or deleted from this document.*

CR #3 - What efforts are being made to work with Native American groups to accomplish cultural resource objectives and achieve goals outlined in existing memoranda of understanding and develop additional memoranda as needs arise?

Close working relationships are maintained with staff cultural specialists employed by the tribal governments of the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians; the Confederated Tribes of Siletz, and the Confederated Tribes of Grand Ronde.

CR #4 - What public education and interpretive programs were developed to promote the appreciation of cultural resources?

A program and exhibit dealing with rock art was developed during the year.

13. VISUAL RESOURCES

VR#1 - Are visual resource design features and mitigation methods being followed during timber sales and other substantial actions in Class II and III areas?

Yes. (FY 1997) - Smaller Ones Timber Sale (EA 96-33) lies in VRM Class III area and also in a Connectivity/Diversity Block within the Matrix LUA. Retention of 12-18 trees per acre, along with road location/design and riparian reserves serve to mitigate visual impacts.

Visual design features were included in the Hult View timber sale (EA 98-04) to protect scenic values visible from Hult View Reservoir.

Where timber sales fall in VRM Class III areas, at least 12-18 trees per acre are retained. This practice usually reduces the visual impacts of timber harvest in most circumstances. No timber

harvest has occurred in VRM Class II areas. Log Creek timber sale unit 3 was a thinning within VRM III, which left more than the required 12-18 trees per acre were left.

14. WILD AND SCENIC RIVERS

WSR#1 - Are BLM actions and BLM authorized actions consistent with protection of the ORVs designated suitable and eligible, but not studied, rivers?

Yes, ORVs are being protected through specialist review of proposed projects.

Very little has been done within the McKenzie WSR corridor. A boat ramp that was damaged by the 1997 flood was repaired and a timber sale is being designed to meet the objectives of the WSR as described in the RMP, and toilets were installed at the Silver Creek boat ramp.

WSR#2 - Are existing plans being revised to conform to Aquatic Conservation Strategy Objectives? Are revised plans being implemented?

There are no formal plans developed at this time for our eligible rivers.

15. RURAL INTERFACE AREAS

RIF #1 - Are design features and mitigation measures developed and implemented to avoid/minimize impacts to health, life, property, and quality of life and to minimize the possibility of conflicts between private and Federal land management?

Yes, one timber sale (Petzold road timber sale; EA 95-08) was implemented that required rural interface design features.

Log Creek unit 3 was a thinning unit that required these standards that easily fit within the parameters of this standard and guideline.

16. SOCIOECONOMIC CONDITIONS

SC#1 - What innovative strategies and programs have been developed through coordination with State and local governments to support local economies and enhance local communities?

South Valley RA continues to implement the MOU signed in 1994 with seven local agencies and organizations for the management of the ROW River Trail. Trail related contracts have been issued through Jobs In The Woods, and cooperation with the city of Cottage Grove regarding city-owned portions of the trail is on-going.

The Lane County "inmate crew" was utilized to perform trail maintenance at Clay Creek. The Southern Willamette Demo Crew Project (a partnership) continued into FY 98. Six displaced forest workers were hired and trained to accomplish watershed restoration projects in the Coast Range Resource Area under an Assistance Agreement. Coast Range RA actively participates and supports the work of the Siuslaw and Long Tom Watershed Councils both financially and in-kind services such as mailings, photocopy, and facilitation of meetings.

McKenzie Resource Area is an active member of the McKenzie Watershed Council and an active participant in the Lost Creek Watershed Council and the Mohawk Watershed Planning Group. We have had staff work on technical committees for watershed groups. Our staff have helped with the implementation of some of the councils projects. We have helped watershed groups in distribution of the newsletters to their communities.

For several years, we have worked with the Forest Service in developing contracts for forest restoration work. This effort has produced contracts that provide more projects per contract which enables the contractors to have more work. Combining our projects with the Forest Service has reduced the amount of work needed to offer contract work.

SC#2 - Are RMP implementation strategies being identified that support local economies?

Yes. JITW contracts for the Row River Trail, culvert replacement, and wildlife habitat improvement, and PCT contracts are two examples that support the local economy.

BLM authorized a horse poker ride at Hult Reservoir to raise money for Special Olympics.

Small contracts were advertised in an effort to have Demo Crew graduates bid on them and accomplish restoration work.

See response to SC#1.

SC#3 - What is the status of planning and developing amenities that enhance local communities?

Includes recreation and wildlife viewing facilities

Continued development of the Row River Trail.
Planning coordination has begun with local horse riding organization for trail development in the Upper Lake Creek SRMA.

17. RECREATION

RN#2 - What is the status of development and implementation of recreation plans?

Recreation Management Plans have been completed for the Row river, Mohawk, and Lower Lake Creek Special Recreation Management Area. A draft RAMP for the McKenzie River SRMA is awaiting landscape planning and watershed analysis completions for the plan area. The Upper Lake Creek RAMP was initiated in FY 1997. ROW River Trail RAMP implementation continuing.

18. TIMBER RESOURCES

TR#1 - By land use allocation, how do timber sale volumes, harvested acres, and the age and type of regeneration harvest stands compare to the projections in the SEIS/ROD Standards and Guidelines, and RMP?

The formal third year evaluation, which is to be completed later this fiscal year will compare these.

TR#2- Were the silvicultural (e.g. planting with genetically selected stock, fertilization, release, and thinning) and forest health practices anticipated in the calculation of the expected sale quantity implemented? Differences in activity levels and projections are shown below.

Silvicultural Practices	Average Annual Acres (1996-1998) Matrix Only	Annual Commitment from RMP
Site Preparation - prescribed fire	47	1,070
Site Preparation - other	266	350
Vegetation Control	498	340
Animal Damage Control	449	600
Precommercial Thinning	1035	590
Brushfield/hardwood conversion	0	50
Planting/regular stock	335	0
Planting/genetically selected stock	172	680
Fertilization	0	1,670
Pruning	28	630

The projected ROD figures are an annual average for the first decade of the plan and, as such, the actual annual level of activity will vary from year to year. Annual activities that varied insignificantly with our ROD are site preparation, vegetation control, and animal damage control.

The most significant difference in annual activity to date versus projections is the fertilization and the fire site preparation program. The fertilization difference represents the delay of implementing the program in past years because of environmental concerns, and funding. Currently, 2,500 acres per year are planned to be accomplished. The prescribed fire site preparation ROD projections included 990 acres of habitat maintenance, restoration, and hazard reduction and 80 acres of site prep. burning throughout all land-use allocations. No acres have been burned for habitat reasons mainly because of lack of funding and environmental risk. The ROD acreage projections seem high and should be reviewed.

Precommercial thinning has been at an elevated rate mainly due to a backlog of existing stands. This is a short-term condition and the number of acres treated annually should drop in the next few years. Brushfield/hardwood conversion and pruning ROD estimates are probably above current needs and should be adjusted. Tree planting has been a little lower than ROD projections mainly due to the lag time to get units harvested under the new Forest Plan. The lower percent of units planted with genetic stock is because of the start-up time lag at the seed orchards in producing available genetic seed and an overestimate of the percent of lands that we feel can be planted with genetic stock (We estimated that 100% of our matrix lands would be planted with genetic stock.). Nursery underruns and/or not having specific seedling needs for an area make meeting 100% impossible, a truer estimate would be that about 90% of our annual tree planting on matrix lands would be planted with genetic stock.

19. SPECIAL FOREST PRODUCTS

SFP #1 - Is the sustainability and protection of Special Forest Product resources ensured prior to selling Special Forest Products?

Limits on Special Forest Product extraction are based on the perceived susceptibility of the resource to over harvesting. For example, collection of moss may be far more limited in areas and quantities than the collection of salal (which is a prolific resprouter) for greenery. Restriction of moss harvest now includes a maximum 1000 pounds from any one section and this is tracked. Where specific concerns are identified such as with the sustainability of moss, the District is implementing research projects to help assess the biomass of moss on the district, the recovery of this resource after harvest, and the effects of moss harvest on the moss species themselves and associated invertebrate community. Information from this work will be used to guide future moss harvest.

On-the-ground meetings with harvesters and inspection of harvest areas, helps to assure that over harvest is not occurring and also helps to assure that any other secondary damage, such as raking in mushroom habitat, is not occurring.

SFP #2 - What is the status of the development and implementation of specific guidelines for the management of individual Special Forest Products?

Special Forest Products Procedure Series (1994) outlines guidelines for Special Forest Product collection.

20. NOXIOUS WEEDS

NW #1 - Are noxious weed control methods compatible with Aquatic Conservation Strategy Objectives?

Manual control methods are compatible with Aquatic Conservation Strategy Objectives, in that it maintains the chemical integrity of the ecosystem. Noxious weeds could cause increased sedimentation, because of their capabilities to alter the species and structure composition allowing for elevated rates of surface erosion.

21. FIRE AND FUELS MANAGEMENT

FM#1 - What is the status of the preparation and implementation of fire management plans for Late-Successional Reserves and Adaptive Management Areas?

See LSR #1.

A fire history regime has been conducted on the Bear-Marten Watershed.

Nothing has been done beyond the Late Successional Reserve assessments for the Oregon Coast Province (southern portion), and the Oregon Southern Cascade plan is still in progress (very little Eugene District LSR in North Cascade Province).

FM#2 - Have additional analysis and planning been completed to allow some natural fires to burn under prescribed conditions?

No.

FM#3 - Do wildfire suppression plans emphasize maintaining late-Successional habitat?

Yes. Both the Southern Oregon Coast Province fire plan and the Southern Cascade Province fire plan emphasize maintenance of late Successional habitat.

FM#4 - Are Wildfire Situation Analyses being prepared for wildfires that escape initial attack?

Yes they would be, however no wildfires occurred in Eugene District in FY 98.

FM#5 - What is the status of the interdisciplinary team preparation and implementation of fuel hazard reduction plans?

Site prep (including fuel hazard reduction) is discussed by timber sale IDTs. If the district fuels specialist determines from on-site investigation that modifications to the project design are warranted, the IDT discusses proposed modifications and presents a recommendation to the Resource Area Manager. No IDT work has taken place on fuel hazard reduction in natural fuels within the Eugene District.

APPENDIX 4

MODIFICATIONS BEING CONSIDERED FOR SURVEY & MANAGE / PROTECTION BUFFER GUIDELINES

On November 15, 1998, the Forest Service and Bureau of Land Management (the Agencies) filed a Notice of Intent to prepare an Environmental Impact Statement (EIS) in the Federal Register. During the four years since the Record of Decision (ROD) was published, the Agencies have acquired considerable information about species' abundance and survey feasibility that prompted consideration of adjustments to the Survey and Manage and Protection Buffer provisions. The Agencies are developing and considering alternatives for a process to revise the Survey and Manage and Protection Buffer standards and guidelines in order to increase the efficiency and consistency of these mitigation measures.

The Northwest Forest Plan stated that the standards and guidelines must have the flexibility to adapt and respond to new information, and that an adaptive management process would be implemented to maximize the benefits and efficiency of the standards and guidelines (ROD, pp. E-12 - E-13). The ROD anticipated that, as experience was gained in the implementation of this mitigation measure, the Agencies could make changes in Survey and Manage provisions, including "changing the schedule, moving a species from one survey strategy to another, or dropping this mitigation requirement for any species whose status is determined to be more secure than originally projected" (ROD, p. 37). There is a need to clarify the process by which the Agencies make changes to the Survey and Manage provisions.

As stated in the Northwest Forest Plan, our goal is to continue the current Survey and Manage strategy on Federal lands -- a combination of managing known sites and increasing our information base through surveys -- but making the process more efficient and consistent. At this initial stage, the EIS is planned to address:

·revision of Survey and Manage standards and guidelines and survey strategy classifications of species; making the standards and guidelines clearer and more easily understood;
·discontinuation of the Protection Buffer standards and guidelines and covering those species under the Survey and Manage standards and guidelines;
·providing a detailed process and clearer criteria for making changes to species' status in response to new information; and
·recategorization of some Survey and Manage species through an initial use of the above process.

This initial proposed action may be refined or modified based on scoping from within the Agencies and from the public. The Agencies are tentatively planning to consider a range of alternatives.

We are preparing an EIS to analyze the effects of the proposed action and alternatives. We expect to release the Draft EIS for public review in spring of 1999. In the 90 days following release of the Draft EIS, we will accept public comments on the proposed action and alternatives and our assessment of the effects. A final EIS will be prepared and, at this time, the decision regarding this action is expected in the fall of 1999.

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